

Operating Instructions Software Guide



- 1 Preparing for Printing
- 2 Printing Documents
- **3** Printing Stored Documents
- 4 Making Printer Settings Using the Control Panel
- (5) Monitoring and Configuring the Printer
- 6 Using a Printer Server
- 7 Mac OS Configuration
- 8 Security Measures Provided by this Printer
- 9 Appendix

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TABLE OF CONTENTS

Manuals for This Printer	11
How to Read This Manual	12
Symbols	12
About IP Address	12
Model-Specific Information	13
List of Options	14
Using Keys	15
1. Preparing for Printing	
Confirming the Connection Method	17
Network Connection	17
Local Connection	19
Installing the Printer Driver	20
Quick Install	20
Installing the Printer Driver for the Selected Port	21
Using as a Windows Network Printer	37
Using as a NetWare Print Server / Remote Printer	40
When using the PostScript 3 Printer Driver	41
Form Feed	42
Banner Page	42
Printing after Resetting the Printer	42
Installing the Printer Driver Using USB	43
Windows 2000/XP, Windows Server 2003/2003 R2 - USB	43
Windows Vista, Windows Server 2008 - USB	44
Troubleshooting USB	45
Printing with Parallel Connection	46
Messages Displayed When Installing the Printer Driver	49
Windows 2000	49
Windows XP Professional or Windows Server 2003/2003 R2	49
Windows XP Home Edition	50
Windows Vista, Windows Server 2008	50
Making Option Settings for the Printer	52
Conditions for Bidirectional Communication	52
If Bidirectional Communication Is Disabled	53

Installing Font Manager	54
Using Adobe PageMaker Version 6.0, 6.5, or 7.0	55
2. Printing Documents	
Two Dialog Box Types	
Displaying the Printer Driver Settings Screen	58
Making printer default settings - the printer properties	58
Making printer default settings - printing preferences	58
Making printer settings from an application	59
Frequently Used Print Methods	60
Standard Printing	60
Printing on both sides of sheets	61
Combining Multiple Pages into Single Page	65
Printing with Watermark/Overlay	68
Using Custom Settings	70
Advanced Printing	71
Settings that can be changed on each Tab	71
Printing on Cover Sheet	72
Inserting Slip Sheets	73
Using Collate Function	74
Spool Printing	75
Printing a PDF File Directly	78
Using DeskTopBinder Lite	78
Using Commands	82
Unauthorized Copy Control	83
Opening the Unauthorized Copy Control Window	83
Using [Data security for copying]	83
Using [Mask type:]	85
Important Notice	86
Specifying the Classification Code for a Print Job	87
Using the Virtual Printer	89
Adding a Virtual Printer	89
Changing a Virtual Printer Configuration	90
Confirming a Virtual Printer Configuration	90

Deleting a Virtual Printer	91
Printing Using a Virtual Printer	91
Memory Capacity and Paper Size	93
One-sided printing (1200 × 600 dpi)	93
Duplex printing (1200 × 600 dpi)	93
If Error Occurs with the Specified Paper Size and Type	94
Printing from a Selected Tray	94
Canceling a Print Job	95
3. Printing Stored Documents	
Printing from the Print Job Screen	97
Sample Print	97
Locked Print	103
Hold Print	109
Stored Print	115
Canceling a Print Job	122
Canceling a Print Job Using the Control Panel	122
Windows - Canceling a Print Job from the computer	122
Mac OS - Canceling a Print Job from the computer	123
4. Making Printer Settings Using the Control Panel	
Menu Chart	125
Checking the Error Log	132
Memory Erase Info Menu	134
Paper Input Menu	135
Changing the Paper Input Menu	135
Paper Input Menu Parameters	137
List/Test Print Menu	141
Printing a Configuration Page	141
Interpreting the Configuration Page	142
List/Test Print Menu Parameters	144
Maintenance Menu	145
Changing the Maintenance Menu	145
Maintenance Menu Parameters	146
System Menu	149

Changing the System Menu	149
System Menu parameters	150
Host Interface Menu	158
Changing the Host Interface Menu	158
Host Interface Menu Parameters	159
PCL Menu	166
Changing the PCL Menu	166
PCL Menu Parameters	167
PS Menu	170
Changing the PS Menu	170
PS Menu Parameters	171
PDF Menu	173
Changing the PDF Menu	173
PDF Menu Parameters	174
IPDS Menu	175
Changing the IPDS Menu	175
IPDS Menu Parameters	175
Language Menu	183
Changing the Language Menu	183
Language Menu Parameters	183
5. Monitoring and Configuring the Printer	
Using Web Image Monitor	
Displaying Top Page	186
When User Authentication is Set	187
About Menu and Mode	188
Access in the Administrator Mode	189
Displaying Web Image Monitor Help	190
Registering Classification Codes	192
Configuring Classification Codes	193
Using SmartDeviceMonitor for Admin	
Installing SmartDeviceMonitor for Admin	
Changing the Network Interface Board Configuration	
Locking the Menus on the Printer's Control Panel	

Changing the Paper Type	197
Managing User Information	198
Configuring the Energy Saver Mode	204
Setting a Password	204
Checking the Printer Status	205
Changing Names and Comments	206
Viewing and Deleting Spool Print Jobs	207
Using SmartDeviceMonitor for Client	208
Monitoring Printers	208
Checking the Printer Status	209
When Using IPP with SmartDeviceMonitor for Client	209
Printer Status Notification by E-Mail	211
Auto E-mail Notification	212
On-demand E-mail Notification	213
Mail authentication	213
Sending On-demand E-mail	214
Remote Maintenance by telnet	218
Using telnet	218
8021x	219
access	220
appletalk	221
authfree	222
autonet	222
bonjour	223
devicename	224
dhcp	225
dhcp6	226
diprint	226
dns	227
domainname	229
etherauth	230
etherconfig	230
help	230

hostname	231
ifconfig	231
info	232
ipds	233
ipsec	233
ipp	234
ipv6	234
lpr	235
netware	235
passwd	236
pathmtu	237
prnlog	237
rhpp	238
route	238
set	240
show	242
slp	243
smb	243
snmp	244
sntp	247
spoolsw	
ssdp	248
ssh	249
status	250
syslog	
upnp	
web	
wiconfig	
wins	
wsmfp	
NMP	
Setting Printer Information over the Network	
Current Printer Status	250

Printer Configuration	263
Understanding the Displayed Information	265
Print Job Information	265
Print Log Information	265
Configuring the Network Interface Board	267
Message List	277
System Log Information	277
6. Using a Printer Server	
Preparing Printer Server	283
Printing notification via SmartDeviceMonitor for Client	283
Using NetWare	285
Setting Up as a Print Server (NetWare 3.x)	286
Setting Up as a Print Server (NetWare 4.x, 5 / 5.1, 6 / 6.5)	287
Using Pure IP in the NetWare 5 / 5.1 or 6 / 6.5 Environment	288
Setting Up as a Remote Printer (NetWare 3.x)	290
Setting Up as a Remote Printer (NetWare 4.x, 5 / 5.1, 6 / 6.5)	292
7. Mac OS Configuration	
Mac OS	295
Installing the PPD Files	295
Setting Up PPD Files	295
Creating a Desktop Printer Icon	296
Setting Up Options	296
Changing to EtherTalk	297
Mac OS X	298
Installing the PPD Files	298
Setting Up the PPD File	298
Setting Up Options	299
Using USB Interface	299
Using Bonjour	300
Changing to EtherTalk	301
Configuring the Printer	302
Using PostScript 3	303
Job Type	303

User Code	322
Paper Size	322
Fit to Paper	322
Input Slot	323
Duplex Printing	323
Toner Saving	324
Collate	324
Paper Type	325
Dithering	325
Printer Utility for Mac	327
Installing Printer Utility for Mac	327
Starting Printer Utility for Mac	328
Printer Utility for Mac Functions	328
8. Security Measures Provided by this Printer	
Preventing Information Leaks	335
Enhanced Network Security	336
Protection Using Encryption	337
SSL (Secure Sockets Layer) Encryption	337
User Settings for SSL (Secure Sockets Layer)	342
Setting the SSL / TLS Encryption Mode	343
SNMPv3 Encryption	344
Deleting Data on the Hard Disk	345
Overwriting Data on the Hard Disk	345
Auto erase memory setting	346
Transmission Using IPsec	350
Encryption and Authentication by IPsec	350
Encryption Key Auto Exchange Settings and Encryption Key Manual Settings	351
IPsec Settings	352
Encryption Key Auto Exchange Settings Configuration Flow	359
Encryption Key Manual Settings Configuration Flow	364
telnet Setting Commands	365
Deactivating IPsec Using the Control Panel	372
9. Appendix	

Software and Utilities Included on the CD-ROM	373
Viewing the Contents of the CD-ROM	373
Printer Drivers for This Printer	374
SmartDeviceMonitor for Admin	375
DeskTopBinder - SmartDeviceMonitor for Client	376
Printing Files Directly from Windows	379
Setup	379
Using a Host Name Instead of an IPv4 Address	379
Printing Commands	380
When Using Windows Terminal Service/MetaFrame	383
Operating Environment	383
Supported Printer Drivers	383
Limitations	383
Using DHCP	385
Using AutoNet	385
Configuring the WINS Server	386
Using Web Image Monitor	386
Using telnet	386
Using the Dynamic DNS Function	387
Updating	387
DNS Servers Targeted for Operation	388
DHCP Servers Targeted for Operation	388
Setting the Dynamic DNS Function	388
Precautions	390
Connecting a Dial-Up Router to a Network	390
When the Wireless LAN Interface Unit Is Installed	390
Copyright Information about Installed Applications	392
expat	392
NetBSD	392
Netatalk(NetBSD)/NetaTalk 1.4b2+asun2.1.3	401
FreeBSD 4.6.2/netipx	402
Sablotron	402
IPFG LIBRARY	402

	SASL	402
	Samba(Ver 3.0.4)	403
	RSA BSAFE [®]	404
	Open SSL	
	Open SSH	406
	Open LDAP	410
	Heimdal	411
	IPS TM print language emulations	411
	racoon	411
	TrouSerS	412
I	NDEX	417

Manuals for This Printer

Read this manual carefully before you use this printer.

Refer to the manuals that are relevant to what you want to do with the printer.



• Media differ according to manual.

Safety Information

Contains information about safe usage of this printer.

To avoid injury and prevent damage to the printer, be sure to read this.

Quick Installation Guide

Contains procedures for removing the printer from its box, connecting it to a computer, and installing its driver.

Hardware Guide

Contains information about paper and procedures such as installing options, replacing consumables, responding to error messages, and resolving jams.

Software Guide (This manual)

Contains information about using this printer, its software, and its security functions.

UNIX Supplement

For "UNIX Supplement", please visit our Web site or consult an authorized dealer.

This manual includes descriptions of functions and settings that might not be available on this printer.



- Manuals provided are specific to machine types.
- The following software products are referred to as using general names:

Product name	General name
DeskTopBinder Lite and DeskTopBinder Professional* 1	DeskTopBinder

*1 Optional

How to Read This Manual

Symbols

This manual uses the following symbols:

Indicates points to pay attention to when using the printer, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

U Note

Indicates supplementary explanations of the printer's functions, and instructions on resolving user errors.

■ Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[]

Indicates the names of keys that appear on the printer's display panel.

[]

Indicates the names of keys on the printer's control panel.

About IP Address

In this manual, "IP address" covers both IPv4 and IPv6 environments. Read the instructions that are relevant to the environment you are using.

Model-Specific Information

In this manual, the following symbols indicate information that relates to a specific printer model.

220-240V

This indicates information about the 220 to 240 V model printer.

Read if you have purchased this model.

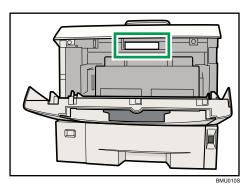
120V

This indicates information about the 120 V model printer.

Read if you have purchased this model.



• Check the label behind the front cover of the printer to identify the printer's model.



List of Options

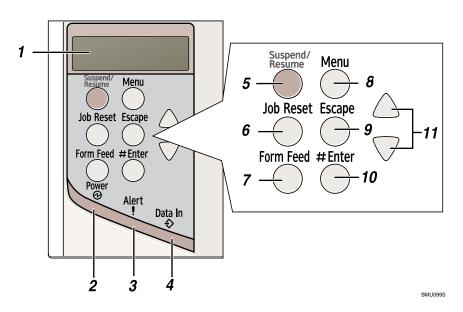
This section provides a list of options for this printer, and how they are referred to as in this manual.

Option list	Description
Paper Feed Unit TK 1030	Paper Feed Unit
Duplex Unit AD1000	Duplex Unit
Envelope Feeder Type 400	Envelope Feeder
Hard Disk Drive Type 2670	Hard disk drive
Memory Unit Type C 128 MB	128 MB SDRAM module
Memory Unit Type C 256 MB	256 MB SDRAM module
Gigabit Ethernet Board Type A	Gigabit Ethernet board
120V IEEE 802.11a/g Interface Unit Type L	Wireless LAN interface unit
220-240V IEEE 802.11a/g Interface Unit Type M	Wireless LAN interface unit
IEEE 1284 Interface Board Type A	IEEE 1284 interface board
Data Overwrite Security Unit Type L	Data overwrite security unit
Data Storage Card Type A	Data storage card
SD card for Netware printing Type B	Netware unit
VM Card Type I	VM card



• For details about the specifications of each option, see "Specifications", Hardware Guide.

Using Keys



1. Display

Displays error messages and the printer's current operational status.

The display's back light turns off when the machine enters Energy Saver mode.

2. Power indicator

Remains lit as long as the printer is powered.

Is unlit when the machine is in Energy Saver mode or is not powered.

3. Alert indicator

Flashes or remains lit when a printer error occurs. A message describing the error will appear on the display panel when this indicator lights up or begins flashing.

4. Data-In indicator

Flashes when the printer is receiving data from a computer.

Remains lit if data is about to be printed.

5. [Suspend/Resume] key

Press this to suspend a print job. This key remains lit as long as the job is suspended. To resume the job, press this key again.

6. [Job Reset] key

When the printer is online, press this to cancel any current print jobs.

For details, see "Canceling a Print Job".

7. [Form Feed] key

When the printer is offline, pressing this will print all the data remaining in the printer's input buffer.

This does not work if the printer is online.

8. [Menu] key

Press this to configure and check the printer's current settings.

9. [Escape] key

Press this to return to the display to its previous state.

10. [# Enter] key

Press this to perform functions that are selected on the display.

Press this to clear errors.

11. [▲] [▼] keys

When making settings, press these to increase or decrease the value of a setting.

Keep the key pressed to quicken scrolling, and increase or decrease a setting's value in steps of 10.

Reference

• p.122 "Canceling a Print Job"

1. Preparing for Printing

This chapter describes how to connect this printer to your computer, and install the printer driver.

Confirming the Connection Method

This printer supports network and local connections.

Before installing the printer driver, check how the printer is connected. Follow the driver installation procedure that is appropriate for the connection method.

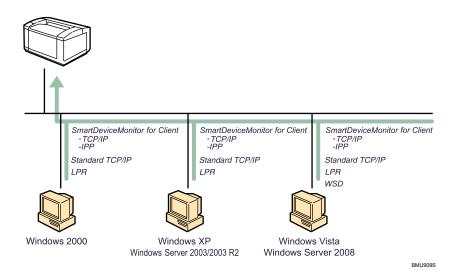
Network Connection

This printer can be used as a Windows printing port or network printer.

Using this printer as a Windows printing port

Network connections can be established through Ethernet and Wireless LAN.

Available ports are determined based on the combination of the Windows operating system version and connection method used.



Windows 2000/XP, Windows Server 2003/2003 R2

Connection Method	Available Ports
• Ethernet	SmartDeviceMonitor for Client port
	Standard TCP/IP port

Connection Method	Available Ports
Wireless LAN	LPR port

Windows Vista, Windows Server 2008

Connection Method	Available Ports
• Ethernet	SmartDeviceMonitor for Client port
Wireless LAN	Standard TCP/IP port
	• LPR port
	WSD port

U Note

- See the explanation about how to install the printer driver for each type of ports.
- For details about the SmartDeviceMonitor for Client port, see "Installing the Printer Driver".
- For details about the Standard TCP/IP port, see "Installing the Printer Driver".
- For details about the LPR port, see "Installing the Printer Driver".
- For details about the WSD port, see "Installing the Printer Driver".

Reference

• p.20 "Installing the Printer Driver"

Using as a network printer

This printer can be used as a Windows network printer, a NetWare print server, or a NetWare remote printer.

BMU910S

UNote

- In an IPv6 environment, NetWare servers cannot be used.
- See the explanation about how to install the printer driver for each type of network printers.
- For details about Windows network printer, see "Using as a Windows Network Printer".
- For details about a NetWare print server and remote printer, see "Using as a NetWare Print Server/ Remote Printer".

Reference

- p.37 "Using as a Windows Network Printer"
- p.40 "Using as a NetWare Print Server / Remote Printer"

Local Connection

Local connections can be established via parallel, and USB connections.

U Note

- See the explanation about how to install the printer driver for each connection method.
- For details about USB connections, see "Installing the Printer Driver Using USB".
- For details about parallel connections, see "Printing with Parallel Connection".

Reference

- p.43 "Installing the Printer Driver Using USB"
- p.46 "Printing with Parallel Connection"

Installing the Printer Driver

This section explains how to install the printer driver. There are two ways to install the printer driver: using Quick Install, which installs the settings at once, or installing the appropriate driver according to the port you want to use.

Downloading the Printer Driver

You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

If your operating system is Windows XP Pro x64, Windows Vista x64, or Windows Server 2003/2003 R2/2008 x64, you must download the printer driver from the supplier's Web site. Select this printer and the operating system you are using, and then download it.

Quick Install

Users of Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008 can install this software easily using the supplied CD-ROM.

Using Quick Install, the PCL and RPCS printer drivers and DeskTopBinder- SmartDeviceMonitor for Client are installed under the network environment, and the TCP/IP port will be set.

- To install the printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrator.
- If this printer is connected using USB, see "Installing the Printer Driver Using USB" and install the printer driver.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

4. Click [Quick Install].

The software license agreement appears in the [License Agreement] dialog box.

- After reading the agreement, click [I accept the agreement.] and then click [Next >].
- 6. Select the printer model you want to use in the [Select Printer] dialog box.

For network connection via TCP/IP, select the printer whose IP address is displayed in [Connect To]. For parallel connection, select the printer whose printer port is displayed in [Connect To].

7. Click [Install].

The printer driver installation starts.

8. Click [Finish].

A message about restarting the computer appears. Restart the computer to complete the installation.

9. Click [Exit] in the first dialog box of the installer, and then take out the CD-ROM.

U Note

- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.
- Select a printer to whose IP address is displayed in [Connect To] to install SmartDeviceMonitor for Client when using TCP/IP.
- Quick Install is not available unless bidirectional communication between the printer and computer
 is enabled via parallel connection. For details about bidirectional communication between the printer
 and computer, see "Making Option Settings for the Printer".

Reference

- p.43 "Installing the Printer Driver Using USB"
- p.52 "Making Option Settings for the Printer"

Installing the Printer Driver for the Selected Port

Using the SmartDeviceMonitor for Client port

- To install SmartDeviceMonitor for Client under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrator.
- Install SmartDeviceMonitor for Client before installing the printer driver when using the SmartDeviceMonitor for Client port.

Installing SmartDeviceMonitor for Client

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [DeskTopBinder SmartDeviceMonitor for Client].
- The message to quit all other applications appears. Quit all applications, and then click [Next
 .
- 6. The software license agreement appears in the [License Agreement] dialog box. After reading through its contents, click [Yes].
- 7. Click [Full install] or [Custom install].

[Full install] installs all required applications: DeskTopBinder Lite and SmartDeviceMonitor for Client.

[Custom install] installs selected applications.

- 8. Follow the instructions on the display and then click [Next >] to proceed to the next step.
- After the installation is completed, select one of the options to restart the computer either now or later, and click [Complete].

Restart the computer to complete the installation.



- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

Changing the port settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP timeout, recovery/parallel printing, and printer groups.

Windows 2000:

- 1. On the [Start] menu, point to [Settings], and then click [Printers].
 - The [Printers] window appears.
- 2. Click the icon of the printer you want to use. On the [File] menu, click [Properties].
- 3. On the [Ports] tab, click [Configure Port].
 - The [Configuration] dialog box appears.

Windows XP, Windows Server 2003/2003 R2:

- 1. On the [Start] menu, click [Printers and Faxes].
 - The [Printers and Faxes] window appears.
- 2. Click the icon of the printer you want to use. On the [File] menu, click [Properties].
- 3. Click the [Ports] tab, and then click [Configure Port].
 - The [Port Configuration] dialog box appears.

Windows Vista, Windows Server 2008:

1. On the [Start] menu, click [Control Panel].

The [Control Panel] window appears.

2. Click [Printer].

The [Printers] window appears.

- 3. Right-click the icon of the printer you want to use, and then click [Properties].
- 4. Click the [Ports] tab, and then click [Configure Port].

The [Port Configuration:] dialog box appears.

U Note

- User, proxy, and timeout settings can be configured for IPP.
- If no settings on the [Recovery/Parallel Printing] tab are available, follow the procedure below.
 - 1. Click [Cancel] to close the [Port Configuration:] dialog box.
 - 2. Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the tasktray.
 - 3. Point to [Properties], and then click Extended Features Settings.
 - 4. Select the Set [Recovery/Parallel Printing] for each port check box.
 - 5. Click [OK] to close the [Extended Features] dialog box.
- For details about these settings, see "Using SmartDeviceMonitor for Client", or SmartDeviceMonitor for Client Help.

Reference

• p.208 "Using SmartDeviceMonitor for Client"

Installing the PCL / RPCS printer drivers (TCP/IP)

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

4. Click [PCL/RPCS Printer Drivers].

5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next>].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

- 7. Click [Next>].
- 8. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [SmartDeviceMonitor], and then click [OK].
- 12. Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

13. Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

- 14. Check that the port of the selected printer is displayed in [Port].
- 15. Set a user code, if necessary.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

- 16. Select the [Default Printer] check box to configure the printer as default.
- 17. Click [Continue].

Installation starts.

18. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].



- Setting a user code allows a SmartDeviceMonitor for Admin user to display and check statistics about the number of sheets which each user prints. For details, see SmartDeviceMonitor for Admin Help.
- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Installing the PostScript 3 printer driver (TCP/IP)

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Local printer] or [Local printer attached to this computer.], and then click [Next >].
 If you are using Windows Vista, you do not need to click [Next >].
- 7. Click [Create a new port:].
- 8. Click [DeskTopBinder SmartDeviceMonitor for Client], and then click [Next >].
- 9. Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

10. Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.

- Check that the name of the machine whose driver you want to install is selected, and then click [Next >].
- 12. Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 13 does not apply for Windows Vista users.

- 13. Specify whether or not to share the printer, and then click [Next >].
- 14. Specify whether or not to print a test page.

If you are using other than Windows Vista, click [Next >].

15. Click [Finish].

The printer driver installation starts.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PCL/RPCS printer drivers (IPP)



- To install printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL/RPCS Printer Drivers].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select a printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

7. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 9. Click [Port], and then click [Add].
- 10. Click [SmartDeviceMonitor], and then click [OK].
- 11. Click [IPP].

12. In the [Printer URL] box, enter "http://printer's IP address/printer" as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://printer's IP address/printer" (Internet Explorer 5.01, or a higher version must be installed). (example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http://printer's IP address/ipp" as the printer's address.

 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing ports.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

14. Click [Detailed Settings] to make necessary settings.

For details about the settings, see SmartDeviceMonitor for Client Help.

- 15. Click [OK].
- 16. Check that the port of the selected printer is displayed in [Port].
- 17. Set a user code, if necessary.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

- 18. Select the [Default Printer] check box to configure the printer as default.
- 19. Click [Continue].

Installation starts.

20. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete the installation.



- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- Setting a user code allows a SmartDeviceMonitor for Admin user to display and check the number
 of sheets each user prints. For details, see SmartDeviceMonitor for Admin Help.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
 Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

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Installing the PostScript 3 printer driver (IPP)

Important

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Local printer attached to this computer.], and then click [Next >].

If you are using Windows Vista, you do not need to click [Next >].

- 7. Click [Create a new port:].
- 8. Click [DeskTopBinder SmartDeviceMonitor], and then click [Next >].
- 9. Click [IPP].
- In the [Printer URL] box, enter "http://(machine's IP address or host name)/printer" as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://(machine's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http://machine's IP address or host name/ipp" as the printer's address.

If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

12. Click [Detailed Settings] to make necessary settings.

If you are using Windows 2000, click [OK] after making necessary settings.

For information about the settings, see DeskTopBinder-SmartDeviceMonitor for Client Help.

- 13. Click [OK].
- Check that the name of the printer driver you want to install is selected, and then click [Next
].
- 15. Change the name of the printer if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 17 does not apply for Windows Vista users.

- 16. Specify whether or not to share the printer, and then click [Next >].
- 17. Specify whether or not to print a test page, and then click [Next >].

If you are using other than Windows Vista, click [Next >].

18. Click [Finish].

The printer driver installation starts.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Using the Standard TCP/IP port

This describes how to install the PCL/RPCS or PostScript 3 printer drivers using the TCP/IP port.



- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.

Installing the PCL/RPCS Printer Drivers

1. Quit all applications currently running.

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2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL/RPCS Printer Drivers].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select a printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

- 7. Click [Next>].
- 8. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [Standard TCP/IP Port], and then click [OK].

Configure the Standard TCP/IP port settings. See Windows Help if [Standard TCP/IP Port] does not appear.

- 12. Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.
- 13. Enter the printer name or IP address in the [Printer Name or IP Address] box.

The [Port Name] text box automatically obtains a port name. Change this name if necessary.

When the device selection appears, select "RICOH NetworkPrinter Driver C Model".

- 14. Click [Next >].
- 15. Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

The installation start dialog box reappears.

- 16. Check that the port of the selected printer is displayed in [Port].
- 17. Configure the default printer as necessary.
- 18. Click [Continue].

The printer driver installation starts.

19. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete the installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- Click [Next >].
- 6. Click [Local printer] or [Local printer attached to this printer], and then click [Next >].
 If you are using Windows Vista, you do not need to click [Next >].
- 7. Click [Create a new port:].
- 8. Click [Standard TCP/IP Port], and then click [Next >].

If you are using other than Windows 2000, [Standard TCP/IP Port] in [Create a new port].

- 9. Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.
- 10. Enter the printer name or IP address in the [Printer Name or IP Address] box.

The [Port Name] text box automatically obtains a port name. Change this name if necessary.

When screen for Device selection appears, select "RICOH NetworkPrinter Driver C Model".

- 11. Click [Next>].
- 12. Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.
- Check that the name of the machine whose driver you want to install is selected, and then click [Next >].
- 14. Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 15 does not apply for other than Windows 2000 users.

- 15. Click [Next>].
- 16. Specify whether or not to share the printer, and then click [Next >].
- 17. Specify whether or not to print a test page.

If you are using other than Windows Vista, click [Next >].

18. Click [Finish].

The printer driver installation starts.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
 Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Using the LPR port

This describes how to install the PCL/RPCS or PostScript 3 printer drivers using the LPR port.



- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- If you are using other than Windows 2000 in an IPv6 environment, you cannot use the LPR Port. Use the DeskTopBinder-SmartDeviceMonitor port.

Installing the PCL/RPCS Printer Drivers

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL/RPCS Printer Drivers].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select a printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

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7. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

- 8. Click [Next>].
- 9. Double click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- Click [Port], and then click [Add].
- 11. Click [LPR Port], and then click [OK].

If [LPR Port] does not appear, see Windows Help and install it.

- 12. Enter the printer's IP address in the [Name or address of server providing lpd] box.
- 13. Enter "lp" in the [Name of printer or print queue on that server] box, and then click [OK].
 The port is added.
- 14. Check that the port of the selected printer is displayed in [Port].
- 15. Configure the default printer as necessary.
- 16. Click [Continue].

The printer driver installation starts.

17. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete the installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

5. Select [My Computer], and then click [Next >].

If you are using Windows 2000, you can click [Next >] without selecting [My Computer].

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- 6. Click [Local printer] or [Local Printer attached to this computer], and then click [Next >].
 If you are using other than Windows Vista, click [Next >]
- 7. Click [Create a new port:].
- 8. Click [LPR Port], and then click [Next >].

 If you are using other than Windows 2000, [Standard TCP/IP Port] in [Create a new port].
- 9. Enter the printer's IP address in the [Name or address of server providing [pd] box.
- 10. Enter "Ip" in the [Name of printer or print queue on that server box], and then click [OK].
- Check that the name of the machine whose driver you want to install is selected, and then click [Next >].
- 12. Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 13 does not apply for Windows Vista users.

- 13. Specify whether or not to share the printer, and then click [Next >].
- 14. Specify whether or not to print a test page.

If you are using other than Windows Vista, click [Next >].

15. Click [Finish].

The printer driver installation starts.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
 Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Using the WSD port

This section explains installation when using the WSD port.



• The WSD port can be used only under Windows Vista and Windows Server 2008.

- To install under Windows Vista and Windows Server 2008, you must have an account that has Manage Printers permission. Log on as an Administrator.
- If the printer is connected using the WSD port, bidirectional communication is not possible. For details
 about bidirectional communication, see "Making Option Settings for the Printer".
- You can connect to the printer only if both the printer and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

Installing the PCL/RPCS Printer Drivers

- 1. Quit all applications currently running.
- 2. On the [Start] menu, click [Network].

The [Network] window appears, and the device search begins automatically.

3. Right-click the printer's icon, and then click [Install].

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] dialog box appears.

4. Click [Locate and install driver software (Recommended)].

If the [User Account Control] dialog box appears, click [Continue].

- 5. Click [Don't search online].
- 6. Click [Browse my computer for driver software (advanced)].
- 7. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click the [close] button and then proceed to step 8.

8. Click [Browse...], and then specify a location for the printer driver.

If the CD-ROM drive letter is D, the printer driver's source files are stored in "D: \DRIVERS\(RPCS, PCL6, or PCL5E)\XP_VISTA\(Language)\DISK1".

9. Click [Next].

If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

10. Click [Close].

If installation is successful, the icon of the printer connected to the "WSD" port is added to the [Printers] window.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Click [Start], and then click [Network].

The [Network] window appears, and the device search begins automatically.

3. Using as the NetWare Print Server / Remote Printer

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] dialog box appears.

4. Click [Locate and install driver software (Recommended)].

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] window appears.

- 5. Click [Don't search online].
- 6. Click [Browse my computer for driver software (advanced)].
- 7. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click the [close] button and then proceed to step 8.

8. Click [Browse...], and then specify a location for the printer driver.

If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1".

9. Click [Next].

If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

10. Click [Close].

If installation is successful, the icon of the printer connected to the "WSD" port is added to the [Printers] window.



- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the printer's icon in the [Network] window, and then click [Uninstall].

Reference

• p.52 "Making Option Settings for the Printer"

Using as a Windows Network Printer

This describes how to install the PCL, RPCS or PostScript 3 printer driver when using the printer as a Windows network printer.

To use the print server, install the printer driver by selecting "Network printer server", and then select the Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008 shared printer.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008 print server. Do not begin the following procedure before the client is set up and configured correctly.

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- To install the printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- If you print with a print server connected to the printer using the SmartDeviceMonitor port, Recovery
 Printing and Parallel Printing cannot be used from the client.
- If you print under Windows XP/Vista or Windows Server 2003/2003 R2/2008 print server, notification functions of SmartDeviceMonitor may not be used with the client.
- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- If you print from a print server connected to the printer using the DeskTopBinder-SmartDeviceMonitor port, the client cannot use Recovery Printing and Parallel Printing.
- If you print with a Windows XP or Windows Server 2003/2003 R2/2008 print server,
 DeskTopBinder-SmartDeviceMonitor notification functions may not be possible for the client.
- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.
- If your operating system is Windows XP Pro x64, Windows Vista x64 or Windows Server 2003/2003 R2/2008 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

Installing the PCL or RPCS Printer Drivers

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

- Select an interface language, and then click [OK].
 The default interface language is English.
- 4. Click [PCL/RPCS Printer Drivers].

5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

- 7. Click [Next>].
- 8. Select the [Printer Name] check box to select the printer models you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [Network Printer], and then click [OK].
- 12. Double-click the computer name you want to use as a print server in the [Browse for Printer] window.
- 13. Select the printer you want to use, and then click [OK].
- 14. Check that the port of the selected printer is displayed in [Port].
- 15. Configure the user code as necessary.

For an RPCS printer driver, a user code can be set after the printer driver installation.

For details about user code, see the printer driver Help.

- 16. Select the [Default Printer] check box to configure the printer as default.
- 17. Click [Continue].

The printer driver installation starts.

18. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

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4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Network printer] or [A network printer, or a printer attached to another computer].
 If you are using other than Windows Vista, click [Next >].
- 7. Select [Browse for a printer], and then click [Next >].

If you are using Windows 2000, select the location method from the [Locate Your Printer] screen before clicking [Next >].

- 8. Double-click the computer name you want to use as a print server in the [Shared printers] window.
- 9. Select the printer you want to use, and then click [Next >].
- 10. The printer driver installation starts.
- 11. Click [Next>].

Select the [Yes] check box to configure the printer as default.

12. Click [Finish].

Restart the computer to complete installation.

Note

- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run.
- If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

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Using as a NetWare Print Server / Remote Printer

This describes how to set up the Windows computer used as a NetWare client.

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- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- In an IPv6 environment, NetWare servers cannot be used.

The following explanation assumes NetWare Client is installed on the client computer and the NetWare server environment is correctly set up. Install all necessary client applications before following this procedure.

Set up the printer driver while logging on to the NetWare file server.

The following values are used in the example:

• NetWare version: 4.1

• File server name: CAREE

• Queue name: R-QUEUE

1. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

2. Select an interface language, and then click [OK].

The default interface language is English.

- 3. Click [PCL/RPCS Printer Drivers].
- 4. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

5. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

- 6. Click [Next >].
- Select the [Printer Name] check box to select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 9. Click [Port], and then click [Add].
- 10. Click [Network Printer], and then click [OK].
- 11. Double-click the name of the NetWare file server on the network tree.

The created queue is displayed.

- 12. Select the print queue, and then click [OK].
- 13. Check that the port of the selected printer is displayed in [Port].
- 14. Click [Continue].

The printer driver installation starts.

- 15. Click [Finish] in the [Select Program] dialog box.
- 16. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

After restarting the computer, open the printer properties from the [Printers and Faxes]
window.

Under Windows 2000/Vista or Windows Server 2003/2003 R2/2008, launch the [Printers] window, and then open the printer properties.

18. Click the [NetWare setting] tab.

Under Windows 2000/Vista or Windows Server 2003/2003 R2/2008, on the [Printer Settings] tab, clear the [Form Feed] and [Enable Banner] check boxes.

Do not select these check boxes since they are automatically selected by the printer driver. If you select the check boxes, the printer may not print correctly.

19. Click [OK] to close the printer properties dialog box.



- To stop installation of the selected software, click [Cancel] before installation is complete.
- The protocol is set to inactive as default. Enable it using SmartDeviceMonitor or Telnet.

When using the PostScript 3 Printer Driver



In an IPv6 environment, Netware servers cannot be used.

Follow the procedure below to set up the PostScript 3 printer driver.

1. In the [Printers] or [Printers and Faxes] window, open the printer properties.

2. Click the [PostScript] tab.

When using Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008, click the [Device Settings] tab, and then proceed to step to clear the check box.

- 3. Click [Advanced].
- Clear the [Send CTRL+D before job] and [Send CTRL+D after job] check boxes, and then click [OK].
- 5. Click [OK] to close the printer properties dialog box.

Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Follow the procedure below to disable form feed according to the operating system used:

Under Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008, clear the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

Banner Page

Do not use NetWare to configure a banner page.

Follow the procedure below to disable banner pages according to the operating system used:

• Under Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008, clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

Printing after Resetting the Printer

Printer to print server connection requires 30 to 40 seconds to resume after the printer is reset. During this period, jobs may be accepted (depending on NetWare specifications) but not printed.

To print after resetting the printer as a remote printer, check on the print server that the remote printer is disconnected, or wait for two minutes before trying to print.

Installing the Printer Driver Using USB

This section explains how to install printer drivers using USB.

Before installing, check that only the operating system is running on the computer and no print jobs are in progress.

The printer drivers can be installed from the CD-ROM provided with this printer.

Windows 2000/XP, Windows Server 2003/2003 R2 - USB

Important

 Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the "USB" port is added to the [Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the printer to install it from the CD-ROM provided.

- 1. Check that the power of the printer is off.
- 2. Connect the printer and computer using the USB cable.

Connect the USB cable firmly.

3. Turn on the power of the printer.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

- 4. In the Found New Hardware Wizard display, click [Search for a suitable driver for my device [recommended]], and then click [Next >].
- 5. Select the [Specify location] check box, and then click [Next >].
- 6. Insert the CD-ROM into the CD-ROM drive.

When Auto Run starts, click [Exit].

Specify the location where the source files of the printer driver are stored.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

RPCS

D:\DRIVERS\RPCS\XP_VISTA\(language)\disk1

• PCL5e

D:\DRIVERS\PCL5E\XP_VISTA\(language)\disk1

PCL6

D:\DRIVERS\PCL6\XP_VISTA\(language)\disk1

PostScript 3
 D:\DRIVERS\PS\XP_VISTA\(language)\disk1

- 8. Check the printer driver location, and then click [OK].
- 9. Click [Next>].
- 10. Click [Finish].

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the "USB001" port is added to the [Printers] window.



- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it
 pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Windows Vista, Windows Server 2008 - USB

 Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the "USB" port is added to the [Printers] window.

The printer drivers can be installed from the CD-ROM provided with this printer.

If the printer driver is not installed, follow the plug-and-play instructions of the printer to install it from the CD-ROM provided.

- 1. Check that the power of the printer is off.
- 2. Connect the printer and computer using a USB cable.

Connect the USB cable firmly.

3. Turn on the power of the printer.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

- 4. In the Found New Hardware Wizard display, click [Search for a suitable driver for my device [recommended]], and then click [Next >].
- 5. Insert the CD-ROM into the CD-ROM drive.

If Auto Run starts, click [Exit].

6. Select the [Include this location in the search] check box under [Search for the best driver in these location], and then click [Browse] to select the printer driver location.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

RPCS

D:\DRIVERS\RPCS\XP_VISTA\(language)\disk1

• PCL5e

 $D: \DRIVERS \PCL5E \XP_VISTA \(language) \disk1$

PCL6

 $D:\DRIVERS\PCL6\XP_VISTA\(language)\disk1$

PostScript 3

D:\DRIVERS\PS\XP_VISTA\(language)\disk1

- 7. Check the printer driver location, and then click [Next >].
- 8. Click [Continue].
- 9. Click [Finish].

If the installation is successful, the icon of the printer connected to the "USB001" port is added to the [Printers and Faxes] window.



- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Troubleshooting USB

Problem	Solutions
The printer is not recognized automatically.	Turn off the power of the printer, reconnect the USB cable, and then turn it on again.
Windows has already configured the USB settings.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help. When using Windows 2000/XP or Windows Server 2003/2003 R2/2008, an erroneous device is displayed under [USB Controller] in the [Device Manager] dialog box.

Printing with Parallel Connection

This describes how to install the PCL, RPCS or PostScript 3 printer driver when using a parallel port.

To use a printer connected using a parallel interface, click [LPT1] when installing the printer driver.

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.
- If your operating system is Windows XP Pro x64, Windows Vista x64, or Windows Server 2003/2003 R2/2008 x64, you must download the printer driver from the manufacturer's Web site.
 Select this printer and the operating system you are using, and then download it.

Installing the PCL or RPCS Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL/RPCS Printer Drivers].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

- 7. Click [Next>].
- 8. Select the [Printer Name] check box to select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Check that [LPT1:] is shown in [Port].
- 11. Select the [Default Printer] check box to configure the printer as default.
- 12. Click [Finish].

The printer driver installation starts.

13. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

Click [Next>].

The following procedure depends on your operation system.

Windows 2000:

1. [Local printer], and then click [Next>].

A dialog box for selecting the printer manufacturer and model name appears.

- 2. Select [LPT1] at the [Printer Port] dialog box, and then click [Next >].
- 3. Select whether or not to share the printer, and then click [Next >].
- 4. Select the name of the machine whose driver you want to install, and then click [Next >1.
- 5. Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

Restart the computer to complete installation.

Other than Windows 2000:

1. Click [Local printer attached to this computer].

If you are using other than Windows Vista, click [Next >].

2. Select the port you want to use, and then click [Next >].

A dialog box for selecting the printer manufacturer and model name appears.

- 3. Select the name of the machine whose driver you want to install, and then click [Next >].
- 4. Click [Close] to close the [Printer Port] dialog box.
- 5. Click [Next>].
- 6. Change the printer name if you want, and then click [Next >].
 - Step 7 does not apply for Windows Vista users.
- 7. Select whether or not to share the printer, and then click [Next >].
- 8. Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

Restart the computer to complete installation.



- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- To stop installation of the selected software, click [Cancel] before installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
 Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Messages Displayed When Installing the Printer Driver

This section describes what to do if a message appears when installing the printer driver.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using [Add Printer] or [Install Printer].

Message number 58 appears if there is a newer version of the printer driver already installed.

Windows 2000

This section describes the procedure under Windows 2000.

- 1. On the [Start] menu, point to [Settings], and then click [Printers].
- 2. Double-click the Add Printer icon.
- 3. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, PCL5E, or PS)\XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

4. Specify a port.



 Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

• p.20 "Installing the Printer Driver"

Windows XP Professional or Windows Server 2003/2003 R2

This section describes the procedure under Windows XP Professional or Windows Server 2003/2003 R2.

- 1. On the [Start] menu, click [Printers and Faxes].
- 2. Click [Add a printer].
- 3. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, PCL5E, or PS)\XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

4. Specify a port.

U Note

 Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

■ Reference

• p.20 "Installing the Printer Driver"

Windows XP Home Edition

This section describes the procedure under Windows XP Home Edition.

- 1. On the [Start] menu, click [Control Panel].
- 2. Click [Printer and Other Hardware].
- 3. Click [Printers and Faxes].
- 4. Click [Add a Printer].
- 5. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, PCL5E, or PS)\XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

6. Specify a port.



 Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

• p.20 "Installing the Printer Driver"

Windows Vista, Windows Server 2008

This section describes the procedure under Windows Vista and Windows Server 2008.

- 1. On the [Start] menu, click [Control Panel].
- 2. Click [Hardware and Sound].
- 3. Click [Printers].
- 4. Click [Add a printer].
- 5. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, PCL5E, or PS)\XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

6. Specify a port.

• Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

■ Reference

• p.20 "Installing the Printer Driver"

Making Option Settings for the Printer

Make option settings for the printer using the printer driver when bidirectional communication is disabled.

Conditions for Bidirectional Communication

Bidirectional communication allows information about paper size and feed direction settings to be automatically sent to the printer. You can check printer status from your computer.

- Bidirectional communication is supported by Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008.
- If you use the RPCS printer driver and bidirectional communication is enabled under Windows 2000, the [Change Accessories] tab is unavailable.

To support bidirectional communication, the following conditions must be met:

When connected with parallel cables

- The computer must support bidirectional communication.
- The printer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The printer must be connected to a computer using the standard parallel cables and parallel connectors.
- Under Windows 2000, [Enable bidirectional support] must be selected, and [Enable printer
 pooling] must not be selected on the [Ports] tab with the RPCS printer driver.

When connected with a network

- The printer must support bidirectional communication.
- The Standard TCP/IP port must be used.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the RPCS printer driver.
- In addition to the above, one of the following conditions must also be met:
 - The SmartDeviceMonitor for Client port and the TCP/IP protocol must be used. When using the IPP protocol, the IPP port name must include the IP address.
 - [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the RPCS printer driver.

When connected with USB

- The printer must be connected to the computer's USB port using a USB interface cable (for Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008).
- The computer must support bidirectional communication.

- **U** Note
 - The RPCS printer driver supports bidirectional communication and updates the printer status automatically.
 - The PCL printer driver supports bidirectional communication. You can update the printer status manually.
 - Install SmartDeviceMonitor for Client from the supplied CD-ROM.

If Bidirectional Communication Is Disabled

Set up option settings when bidirectional communication is disabled.

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- Under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, Manage Printers
 permission is required to change the printer properties in the [Printers] folder. Log on as an
 Administrators or Power Users group member.
- 1. On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

When using Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers]. The [Printers] window appears.

When using Windows Vista and Windows Server 2008, click [Control Panel] on the [start] menu, and then click [Printer]. The [Printers] window appears.

- 2. Click the icon of the printer you want to use.
- 3. On the [File] menu, click [Properties].

When using Windows Vista and Windows 2008, right-click the icon of the printer you want to use, and then click [Properties].

4. Click the [Change Accessories] tab.

If options in the [Change Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.

If you are using the RPCS printer driver, click the [Change Accessories] tab.

- 5. Select options installed from the [Select printer options:] area, and then make the necessary settings.
- Select the total amount of the memory in [Total memory:] when the optional SDRAM module is added.
- 7. Under [Paper source tray settings:], click the tray to be used, and then select the appropriate size, position, and type for the tray. Select the [Do not use Auto Tray Select] check box to exclude the tray from the targets of automatic tray selection.
- 8. Click [OK] to close the printer properties dialog box.

Installing Font Manager

- Under Windows 2000 /XP/Vista, and Windows Server 2003/2003 R2/2008, installing
 applications by Auto Run requires Administrator privilege. To install a printer driver by Auto Run, log
 on using an account that has Administrator privilege.
- 1. Quit all applications currently running.
- $\begin{tabular}{ll} \bf 2. & Insert the CD-ROM into the CD-ROM drive. \end{tabular}$

The installer starts.

- 3. Click [Font Manager].
- 4. Follow the instructions on the display.

Using Adobe PageMaker Version 6.0, 6.5, or 7.0

Under Windows 2000/XP with Adobe PageMaker, you need to copy PPD files to the PageMaker folder. PPD files have the .ppd extension in the folder "DRIVERS \ PS \ XP_VISTA \ (Language) \ DISK 1" on the CD-ROM.

The "XP_VISTA" folder inside the "PS" folder is for Windows 2000/XP, Windows Server 2003/2003 R2. Use the folder that is appropriate for the operating system you are currently using.

The third folder "(Language)" may be substituted by an appropriate language name.

Copy the .ppd file to the PageMaker folder.

- For PageMaker 6.0 default installation
 The directory is "C: \PM6\RSRC\PPD4".
- For PageMaker 6.5 default installation

The directory is "C: \PM65 \RSRC \USENGLISH \PPD4".

The "USENGLISH" may vary depending on your language selection.

• For PageMaker 7.0 default installation

The directory is "C:\PM7\RSRC\USENGLISH\PPD4".

The "USENGLISH" may vary depending on your language selection.



- If the driver is not set correctly after copying the ".ppd" file, printing may not be performed properly.
- When using PageMaker, the optional features that can be selected by the printer driver will not be
 active. The following procedure describes how to activate the optional printer features.
 - On the [File] menu, click [Print].
 The [Print Document] dialog box appears.
 - 2. Make the necessary settings in the [Features] box.

2. Printing Documents

This chapter explains how to print documents using the printer driver. It also describes the procedure for configuring PDF Direct Print and other printing functions.

Two Dialog Box Types

There are two dialog box types of the [Printer Properties] dialog box.

"Custom Setting" is used as an example in this manual. For details about changing the dialog box types, see the printer driver Help.

Multi-tab

This dialog box type is designed for users who often change print settings to perform various printing operations.

Custom Setting

This dialog box type is designed for users who rarely change print settings. This type of dialog box may vary depending on the installed options.

Displaying the Printer Driver Settings Screen

This section explains how to open and configure the printer driver properties.

The following procedure explains how to configure the printer driver settings configure the Windows XP. If you are using another operating system, the procedure might vary slightly.

Making printer default settings - the printer properties

Important

- To change the printer's default settings (including settings for options), log on using an account that
 has Manage Printers permission. Members of the Administrators and Power Users groups have
 Manage Printers permission by default.
- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.
- On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

- 2. Click the icon of the printer you want to use.
- 3. On the [File] menu, click [Properties].

The [Printer Properties] dialog box appears.

When you open the [Printer Properties] dialog box for the first time after installing the RPCS printer driver, a confirmation message appears. After you click [OK], the [Printer Properties] dialog box appears.

4. Make the settings you require, and then click [OK].



- The settings you make here are used as the default settings for all applications.
- For details, see the printer driver Help.

Making printer default settings - printing preferences



- The settings in the "Printing Settings" (Document Properties) dialog box that can be modified and
 retained differ depending on the printer driver, printer icon, and the users registered for each printer
 icon.
- 1. On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

- 2. Click the icon of the printer you want to use.
- On the [File] menu, click [Printing Preferences...].
 The [Printing Preferences] dialog box appears.
- 4. Make the settings you require, and then click [OK].



- The settings you make here are used as the default settings for all applications.
- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains how to make printer settings for a specific application using Windows XP Wordpad as an example.

- 1. On the [File] menu, click [Print...].
 - The [Print] dialog box appears.
- 2. In the [Select Printer] list, select the printer you want to use.
- 3. Click [Preferences].

The [Printing Preferences] dialog box appears.

4. Make the settings you require, and then click [OK].



- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For
 details, see the manuals provided with the application.
- Any settings you make using this procedure apply to the current application only.
- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used the defaults when printing from the application.
- For details, see the printer driver Help.

Frequently Used Print Methods

This chapter explains how to use the various printing functions including normal printing, duplex printing, combine printing, and watermark/overlay printing.

Each function described in this chapter is configured and registered under "Custom Settings". You can also change the parameters for each function by modifying "Custom Settings".



• For details about custom settings, see "Using Custom Settings".

Reference

• p.70 "Using Custom Settings"

Standard Printing

Use the following procedure to print documents using the normal printing function with the printer driver.

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- Before printing, make sure that the settings for the installed options and loaded paper are correctly configured.
- Create a document using an appropriate application. Then, in the application's [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

- 2. In the [Original Size:] list, select the size of the original to be printed.
- In the [Original orientation] area, select [Portrait] or [Landscape] as the orientation of the original.
- 4. In the [Job type:] list, select [Normal Print].

If you want to print multiple copies, specify the number of sets in the [Copies:] box.

In the [Paper source tray:] list, select the paper tray that contains the paper you want to print onto.

If you select [Auto Tray Select] in the [Paper source tray] list, the source tray is automatically selected according to the paper size and type specified.

- 6. In the [Paper type] list, select the type of paper that is loaded in the paper tray.
- 7. Click [OK].
- 8. Print the document using the print function in the document's native application.



- The types of paper loaded in the paper trays are indicated on the printer's display. This allows you
 to see which tray the selected paper type is loaded in. However, the paper type setting available in
 the printing preference dialog box might be different from the type indicated on the printer's display.
- If the paper tray loaded with the specified paper size and type is not available, a warning message
 appears on the machine's control panel. If this happens, follow the instructions in the message to
 specify a paper tray and perform force printing. Alternatively, press the job reset button to cancel
 printing. For details, see "If Error Occurs with the Specified Paper Size and Type".

■ Reference

• p.94 "If Error Occurs with the Specified Paper Size and Type"

Printing on both sides of sheets

This section explains how to print on both sides of each page using the printer driver.

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- Duplex printing is not possible if the paper types listed below are specified. If you want to perform duplex printing, select a paper type other than those listed below:
 - Thick Paper, Special Paper, OHP (Transparency), Envelope, Color Paper, Preprinted Paper
 - Custom Size paper
- 1. Create a document using an appropriate application. Then, in the application's [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

- 2. To use an existing Custom Setting, click the icon in the [Custom Setting name:] box.
 - If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 10.
- 3. Click [Add/Change Custom Settings...].
- 4. Click the [Edit] tab, if it is not already selected.
- 5. Select the [Duplex/Booklet] check box.
- 6. Click the icon of the page opening direction that you require.
 - If you want to add binding margins, select the [Header/Footer/Adjust image position/Binding margins] check box, and then click [Details...].
- 7. Specify the margins on the front and back sides, and then click [OK].
- 8. Change any other print settings if necessary, and then click [Save As...].
 - If you are modifying an existing setting and want to overwrite the previous setting, click the [Save] button and then proceed to step 10.

- 9. In the [Custom Setting name:] box, enter an appropriate name for the settings, and then click [OK].
- 10. Click [OK] to close the printer preferences dialog box.
- 11. Print the document using the print function in the document's native application.



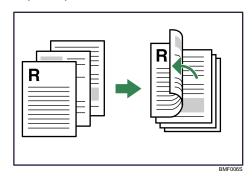
• If the document contains pages with different original sizes, page breaks may occur.

Types of duplex printing

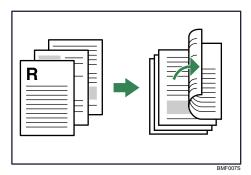
This section explains the binding directions available when using the duplex printing function. When using the duplex printing function, you can select whether to to bind copies by edge or in the center.

Edge Binding

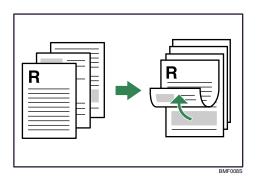
• Duplex-Open to Left



• Duplex-Open to Right

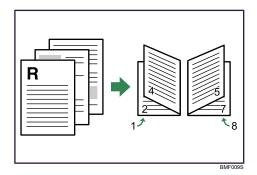


Duplex-Open to Top

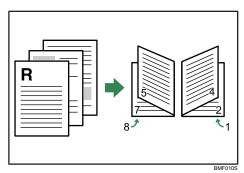


Center Binding

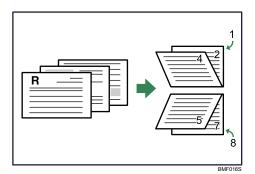
• Booklet 1 -Open to Left



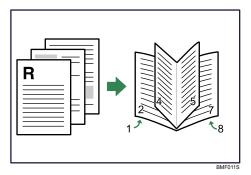
• Booklet 1 -Open to Right



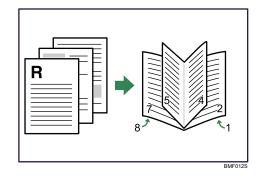
• Booklet 1 -Open to Top



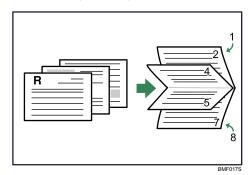
• Booklet 2 -Open to Left



• Booklet 2 -Open to Right



• Booklet 2 -Open to Top





- If you want to specify [Booklet 1 -Open to Top] or [Booklet 2 -Open to Top], you must first select [Landscape] as the setting for [Original orientation].
- If you want to specify [Booklet 1 -Open to Right], [Booklet 1 -Open to Left], [Booklet 2 -Open to Right], or [Booklet 2 -Open to Left], you must first select [Portrait] as the setting for [Original orientation].

Combining Multiple Pages into Single Page

This section explains how to print multiple pages onto a single sheet. The combine printing function allows you to economize on paper by printing multiple sheets at reduced size onto a single sheet.



- The combine printing function is not available on a custom size paper. To use the combine printing function, specify a standard size paper.
- Create a document using an appropriate application. Then, in the application's [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

- 2. To use an existing Custom Setting, click the icon in the [Custom Setting name:] box.
 - If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 9.
- 3. Click [Add/Change Custom Settings...].

button and then proceed to step 9.

- 4. Click the [Edit] tab, if it is not already selected.
- 5. Select the [Layout/Poster] check box, and then select the combination pattern from the list.
- 6. Specify the page order by selecting the appropriate icon.
- 7. Change any other print settings if necessary, and then click [Save As...]
 If you are modifying an existing setting and want to overwrite the previous setting, click the [Save]
- 8. In the [Custom Setting name:] box, enter an appropriate name for the settings, and then click [OK].
- 9. Click [OK] to close the printer preferences dialog box.
- 10. Print the document using the print function in the document's native application.



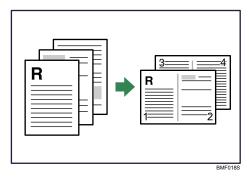
- If the document contains pages with different original sizes, page breaks may occur.
- If the application you are using also has a combine function, disable it. If the application's combine function is also enabled when the driver's combine function enabled, incorrect printing is likely.

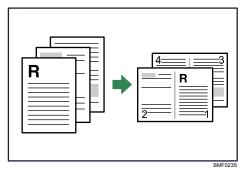
• For details about combining pages with different orientations and other advanced functions, see the printer driver Help.

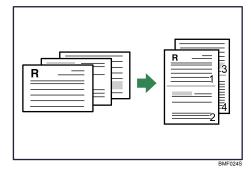
Types of combine printing

This section explains the different methods of combine printing that are available. You can combine 2, 4, 9, or 16 pages onto a single sheet of paper. The page order can be specified from the following four patterns:

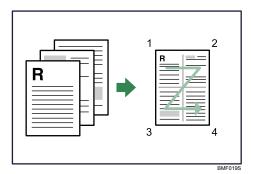
2 pages per sheet

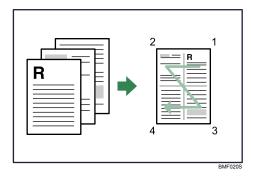


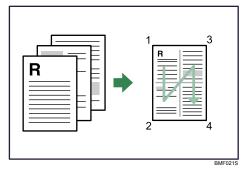


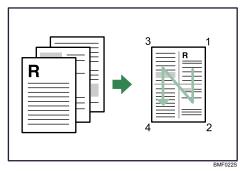


4 pages per sheet









Printing with Watermark/Overlay

This section explains how to print documents with text watermarks using the printer driver.

The watermark function prints text or an image over every page of a document. This function is useful for security or content identification. There are two type of watermark available: "Image" and "Text".

Select "Image" if you want to print a bitmap image (*.bmp) as the watermark. Select "Text" if you want to print text as the watermark image. You can specify only one type of watermark at a time.

 Create a document using an appropriate application. Then, in the application's [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

2. To use an existing Custom Setting, click the icon in the [Custom Setting name:] box.

If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 8.

- 3. Click [Add/Change Custom Settings...].
- 4. Click the [Edit] tab, if it is not already selected.
- Select the [Watermarks/Overlay] check box, and then select the type of the watermarks from the list.

To change the specified watermark, click [Edit].

6. Change any other print settings if necessary, and then click [Save As...]

If you are modifying an existing setting and want to overwrite the previous setting, click the [Save] button and then proceed to step 8.

- 7. In the [Custom Setting name:] box, enter an appropriate name for the settings, and then click [OK].
- 8. Click [OK] to close the printer preferences dialog box.
- 9. Print the document using the print function in the document's native application.



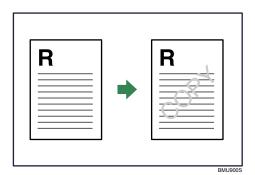
- You do not have to select a watermark from those that are pre-registered in the printer driver: you can create and apply custom watermarks also.
- For details about creating original watermarks, see the printer driver Help.

Types of watermarks

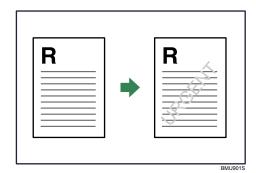
This section explains the types of watermarks available.

Following are the pre-registered text watermarks that are available:

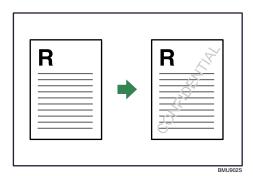
COPY



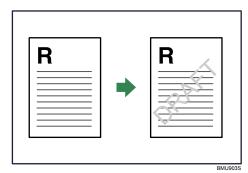
• URGENT



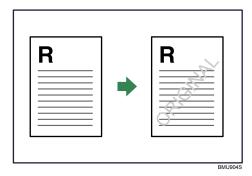
CONFIDENTIAL



• DRAFT



ORIGINAL



Using Custom Settings

This section explains how to register and use custom settings.

Each function explained in this chapter is preconfigured and registered under [Custom Setting name:] on the [Print Settings] tab.

You can apply the relevant setting simply by clicking on the custom setting name. This helps avoid incorrect settings and misprints.

Custom settings can be added, modified, and deleted as required. They can also be shared for use by different users. By using registered custom settings, users without in-depth knowledge of the printer driver can utilize advanced printing functions easily.

For details about registering, modifying, and deleting custom settings, see the printer driver Help.

Advanced Printing

This chapter explains the printer's advanced printing functions.

In addition to the [Edit] tab in the printing preferences dialog box, the [Setup], [Finishing], and [Misc.] tabs also allow you to change print settings. By clicking on these tabs, you can change the settings listed below.

Settings that can be changed on each Tab

The following is an overview of the settings that are available on the [Setup], [Finishing], and [Misc.] tabs.

[Setup] tab

You can enable/disable the cover and slip sheets function.

Cover sheets

Using this function, you can insert cover sheet fed from a different tray to that of the main paper, and print on them. For details, see "Printing on Cover Sheet".

• Slip Sheets

Using this function, you can insert slip sheets fed from a different tray to that of the main paper, and print on them. For details, see "Inserting Slip Sheets".

[Finishing] tab

You can enable/disable the collate function.

Collate

When printing multiple sets of documents such as handouts for meetings, you can have prints delivered in batches of ordered sets. For details about collate function, see "Collate".

[Misc.] tab

You can change various settings for spool printing and other print options.

Spool Printing

The print job is transmitted to the machine and temporarily stored when printing. For details about the spool printing, see "Spool Printing".

Reference

- p.72 " Printing on Cover Sheet"
- p.73 "Inserting Slip Sheets"
- p.74 " Using Collate Function"
- p.75 "Spool Printing"

Printing on Cover Sheet

Using this function, you can insert cover sheet fed from a different tray to that of the main paper, and print on them.

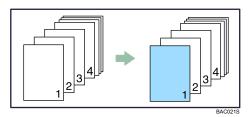


• To use this function, Collate must be set.

Prints the first page of the document on the sheet for the cover page.

Print on one side

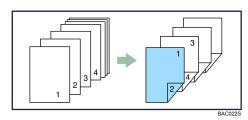
Prints on one side of the cover sheet only, even when duplex printing is selected.



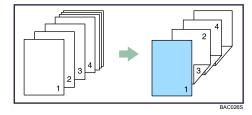
Print on both sides

Prints on both sides of the cover sheet when duplex printing is selected.

• Cover sheet printed on both sides

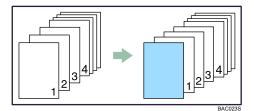


• Cover sheet printed on one side

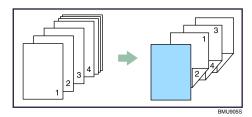


Blank

• When printing one side



· When printing both side



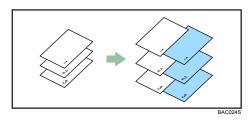


- The cover sheets should be the same size and orientation as the body of the paper.
- If Auto Tray Select is set for the body paper feed tray, body paper will be delivered from a tray that contains paper set in portrait orientation. Therefore, if the cover paper is set to landscape orientation, the orientation of the cover and body paper will be different.
- For printing methods, see the printer driver Help.

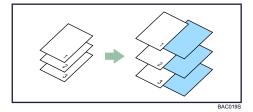
Inserting Slip Sheets

Inserting a slip sheet between each page

• Print

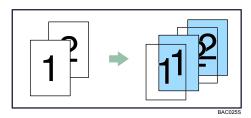


• Blank

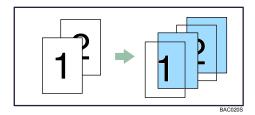


Inserting a slip sheet between OHP transparencies

Print



• Blank





- Collate cannot be set when using slip sheets.
- When the duplex printing or cover printing is set, you cannot insert slip sheets.
- The slip sheet should be the same size and orientation as the body paper.
- If "Auto Tray Select" has been set as the paper feed tray for the body paper, the paper will be delivered from a tray containing paper in \square orientation. Therefore, when the slip sheet has been set to \square orientation, the orientation of the output slip sheet and body paper will be different.
- The same paper feed tray cannot be set for the body of the document and slip sheets.

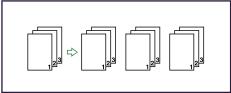
Using Collate Function

The Collate function allows you to print while sorting printouts into page-ordered sets, such as when printing multiple copies of meeting materials.



 Up to 150 pages can be stored using RAM. If the optional hard disk is installed, up to 1,000 pages can be stored.

Output can be assembled as sets in sequential order.



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- If Auto Continue occurs on the first set, Collate will be canceled.
- If forced printing occurs on the first set, Collate will be canceled.
- When setting Collate in the printer driver settings, make sure that a collate option is not selected in the application's print settings. If a collate option is selected, printing will not be as intended.
- For details about printing method, see the printer driver Help.

Spool Printing

With Spool Printing, the print data is saved in the hard disk before printing. To use this function, set it from the menu. See "Remote Maintenance by telnet".

Mportant (

- To use this function, the optional hard disk must be installed on the printer.
- Use the "spoolsw clear job" telnet command to clear a spooled print job. Do not turn off the printer
 or computer while a print job is being spooled and the Data In is flashing. Print jobs that are interrupted
 in this way remain on the printer's hard disk and will finish printing out when the printer is turned back
 on
- The Spool Printing function is available for data received using diprint, lpr, ipp, ftp, and sftp (TCP/IP (IPv6)).
- When using diprint, the Spool Printing function cannot be used with bidirectional communication.
- The domain reserved for spool printing is about 1 GB.
- When Spool Printing is on, the size of a single print job cannot exceed 500 MB.
- When receiving jobs from multiple computers, the printer can spool a maximum of ten lpr jobs, and
 only one diprint, ipp, ftp, sftp, or smb job. If the printer's spooling capacity is exceeded, newer jobs
 cannot be printed. You must wait before sending further jobs.



- Printing the first page with Spool Printing will be slow.
- The computer requires less print processing time when large amounts of data are spooled.
- Stored spool jobs can be viewed or deleted using Web Image Monitor.
- The list of spool jobs cannot be viewed from the printer's control panel.

 For information about the "spoolsw clear job" command on the telnet, see "Remote Maintenance by telnet".

Reference

• p.218 "Remote Maintenance by telnet"

Setting Spool Printing

Spool printing settings can be made using telnet or Web Image Monitor.

- Using Web Image Monitor
 In [System] on the [Configuration] menu, click [Active] in [Spool Printing].
- Using telnet
 Enter "spoolsw spool on".

● Note

- For details about Web Image Monitor, see Web Image Monitor Help.
- For details about "spoolsw spool on", see "Remote Maintenance by telnet".

Reference

• p.218 "Remote Maintenance by telnet"

Viewing or Deleting spooled jobs using Web Image Monitor

Follow the procedure below to check or delete spooled jobs using Web Image Monitor.

- 1. Open a Web browser.
- Enter "http://(printer's address)/" in the address bar to access the printer whose settings you want to change.

Top Page of Web Image Monitor appears.

3. Click [Login].

The window for entering the login user name and password appears.

4. Enter the login user name and password, and then click [Login].

Contact your administrator for information about the settings.

5. In the menu area, click [Job].

A submenu will appear.

6. On the [Printer] menu, click [Spool Printing].

A list of spooled jobs appears.

- 7. To delete a job, select the check box of the job you want to delete, and then click [Delete].

 The selected job is deleted.
- 8. Click [Logout].
- 9. Quit Web Image Monitor.



• For details about Web Image Monitor, see Web Image Monitor Help.

Printing a PDF File Directly

You can send PDF files directly to the printer for printing, without having to open a PDF application.

There are two methods of printing the PDF files directly, either using the DeskTopBinder Lite, or entering commands.



- This function is possible for genuine Adobe PDF files only.
- Version 1.3, 1.4, 1.5, and 1.6 PDF files are compatible.
- PDF files created using PDF version 1.5 Crypt Filter functions cannot be printed.
- The following types of PDF cannot be printed: PDF files created using PDF version 1.6 watermark note
 functions, PDF files whose page size exceeds 5.08 m, PDF files containing embedded OpenType
 fonts, 128-bit AES security formatted PDF files, and PDF files that contain extended options.
- To print a document that contains data using the transparency function data, the optional memory
 unit must be installed. However, the operation might still fail, depending on the data contained in the
 document. If this happens, use the printer driver to print the document.
- To print a document that contains transparency function data, the optional hard disk drive must be installed. If it is not, transparent area data might not print out correctly.



Paper size errors may occur when printing on custom size paper.

Using DeskTopBinder Lite

Installing DeskTopBinder Lite

Use this procedure to install DeskTopBinder Lite.

- 1. Quit all applications currently running.
 - 1. Insert the "Document Management Utility" CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work under certain operating system settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.

2. Click [DeskTopBinder Lite].

The [DeskTopBinder Lite] dialog box appears.

3. Click [DeskTopBinder Lite], and then click [OK].

4. Follow the instructions on the display to install DeskTopBinder Lite.

If you are required to restart the computer after installing DeskTopBinder Lite, restart the computer and continue the configuration.

DeskTopBinder Lite enhancements

Follow the DeskTopBinder Lite enhancement procedure to print PDF files directly.

1. On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Extended Features Wizard].

The [Extended Features Wizard] dialog box appears.

- 2. Click [Start], and then click [Next>] repeatedly until the [Printing Function2] dialog box appears.
- 3. In the [Printing Function2] dialog box, click [Add...].

The [PDF Direct Print Properties] dialog box appears.

4. Select the driver for this printer, and then click [OK].

The [PDF Direct Print Properties] dialog box closes.

- 5. Click [Next>] repeatedly until [Finish] appears.
- 6. Click [Finish].

Function palette

The Function palette contains buttons for functions that are already configured through DeskTopBinder Lite enhancement. Using these buttons, you can print Windows files, preview printouts, convert images, and register scanners for documents without having to open DeskTopBinder Lite. You can also use these functions simply by dragging a target file to the button corresponding to the required function and dropping it there.

 On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Function Palette].

An icon for the Function palette is added to the task tray displayed at the bottom right of the screen.

- Right-click the new icon that has been added to the task tray, and then click [Properties...].The [Properties] dialog box appears.
- Click the [Contents] tab, select the [PDF Direct Print] check box at the center, and then click [OK].

The [Properties] screen closes and the [PDF Direct Print] icon is added to the palette.

PDF direct printing

Follow the procedure below to print PDF files directly.

 Drag the PDF file you want to print to the PDF Direct Printing icon in the palette and drop it there.

The [Output File List-PDF Direct Print] dialog box appears.

2. Highlight the PDF you want to print, and then click [OK].

The PDF file is printed.

Printing PDF password-protected documents

Follow the procedure below to print password- protected PDF files.

 On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Extended Features Wizard].

The [Extended Features Wizard] dialog box appears.

- 2. Click [Start], and then click [Next>] repeatedly until the [Printing Function2] dialog box appears.
- 3. In the [Printing Function2] dialog box, click [Properties].

The [PDF Direct Print Properties] dialog box appears.

- 4. Select the [Use PDF Password] check box at the bottom right of the dialog box, and then click [OK].
- 5. Click [Next>] repeatedly until [Finish] appears.
- 6. Click [Finish].

The [Extended Features Wizard] dialog box closes.

Drag the PDF file you want to print over the PDF Direct Printing icon on the Function Palette and drop it there.

The [Output File List-PDF Direct Print] dialog box appears.

- 8. Click on the PDF file you want to print, making it appear highlighted, and then click [OK].
 The [PDF Direct Print Properties] dialog box appears.
- 9. In the [PDF password:] box at the bottom right of the dialog box, enter the password for the PDF file you want to print, and then click [OK].

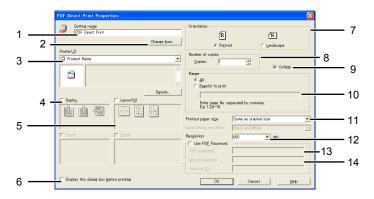
The password-protected PDF file is printed.



- Before printing a password-protected PDF file, perform one of the followings:
 - In the [PDF Direct Print Properties] dialog box, enter the password for the PDF file you want to print

- Specify a password for the PDF file by selecting [PDF: Change PW] in the [PDF Menu] on the
 printer's control panel.
- If a [PDF: Group PW] for the [PDF Menu] has been specified using DeskTopBinder Lite or the printer's control panel, the same group password must be set on the other also.

PDF Direct Print Properties



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1. Setting name:

Displays the plug-in configuration name (up to 63 single byte characters)

2. Change Icon...

Changes the icon displayed on the tool bar.

3. Printer:

Displays a list of RPCS drivers that support PDF direct printing.

4. Duplex

Prints on both sides of sheets.

5. Layout

Prints multiple pages on a single sheet.

6. Display this dialog box before printing

Appears in PDF direct printing mode if this check box is selected.

7. Orientation:

Specify the original's orientation.

8. Number of copies

Specify the number of copies to print.

9. Collate

Sorts printed sheets.

10. Range:

Specify which paper to print.

11. Printout paper size:

Specify the paper size you want copies to be printed onto.

12. Resolution:

Specify a print resolution.

13. PDF password:

Enter the password for password-protected PDF files. A password-protected PDF file cannot be printed unless its password is entered here.

14. Group password:

If a group password is assigned to DeskTopBinder Lite and this printer, enter the group password in this field. The group password must be entered for printing to start.

Using Commands

You can print PDF files directly, using commands such as "ftp", "sftp", and "lpr".

For details about UNIX commands, see UNIX supplement.

Unauthorized Copy Control

You can embed patterns and text under printed text to prevent unauthorized copying of the document. Unauthorized Copy Control consists of two functions: [Data security for copying] and [Mask type:].



 This function is designed to discourage copying of confidential documents; it does not prevent unauthorized use of information.

Opening the Unauthorized Copy Control Window

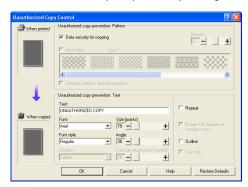
- 1. In the RPCS printer driver, open the [Printing Preference] window.
- 2. Click [Add/Change Custom Settings...].
- 3. Select the [Unauthorized copy...] check box.
- Click [Control Settings...].
 The Unauthorized Copy Control window appears.



• For details, see the printer driver Help.

Using [Data security for copying]

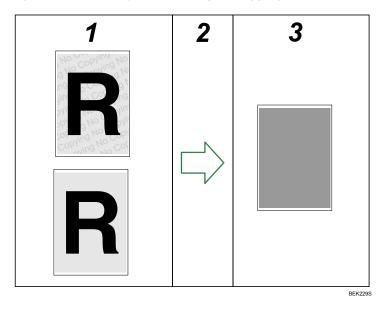
You can embed a print pattern by setting it in the printer driver.



Setting [Data security for copying] in the printer driver

- Select the [Data security for copying] check box. You can also enter the text in the [Text:] box.
- You cannot select the [Mask type:] check box at the same time.
- To print a document protected by gray overprint, the printer must be set up correctly. Consult
 your administrator.

Printing a document using [Data security for copying]



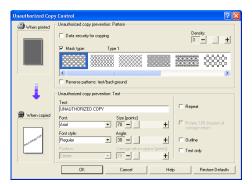
- 1. The pattern and text you have set is printed.
- The document is copied or stored in copiers / multifunction machines which the optional Copy Data Security unit is installed.
- 3. The document is blanked by vertical stripes overprint.



- When printing a document that is set with [Data security for copying], the printer does not require the
 optional Copy Data Security unit to be installed. The Copy Data Security unit is required when copying
 or storing a document protected by vertical stripes overprint.
- Only the RPCS printer driver is supported.
- Printing at 200 × 200 dpi is not possible.
- You cannot partially embed a pattern and text in a document.
- To make the embedded pattern clear, set the character size at least 50 pt (preferably 70 to 80 pt) and character angle to between 30 and 40 degrees.
- Use 182×257 mm ($7^{1}/_{4} \times 10^{1}/_{2}$ inches) or larger paper.
- Use ordinary or recycled paper of at least 70% whiteness.
- Duplex printing may interfere with this function as a result of text and patterns being visible through the paper.
- For details about setting [Data security for copying], see the printer driver Help.

Using [Mask type:]

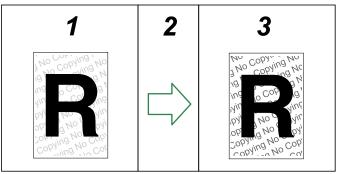
You can embed patterns and texts in a document by setting in the printer driver to prevent unauthorized copying.



Setting [Mask type:] in the printer driver

- Select a pattern from [Mask type:], and then enter texts in the [Text:] box.
- You can set only [Text:], but [Mask type:] and [Text:] must be set together.

Printing a document using [Mask type:]



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- 1. The pattern and text you have set is printed palely.
- 2. The document is copied, scanned, or stored in copiers/ multifunction machines.
- 3. The pattern and text you have set appear clearly.



- Only the RPCS printer driver is supported.
- Printing at 200 × 200 dpi is not possible.
- You cannot partially embed patterns and texts strings in a document.
- To make the embedded pattern clear, set the character size at least 50 pt (preferably 70 to 80 pt) and character angle to between 30 and 40 degrees.

- Due to the effects of the settings, the results of copying, scanning, and saving documents in the document server may vary depending on the printer model and setting conditions.
- Printing with background patterns and texts may be slower than normal printing.
- For details about setting [Mask type:], see the printer driver Help.

Important Notice

- The supplier does not provide warranty regarding the appearance of print patterns and other copy
 protection features. The appearance of the print patterns and the performance of Unauthorized Copy
 Control may vary depending on the quality of paper used and the printer model and settings.
- The supplier takes no responsibility for any damages sustained in connection with use of or inability to make use of Unauthorized Copy Control print patterns.

2

Specifying the Classification Code for a Print Job

When printing in an environment where classification codes are required, a classification code must be specified for each print job.



• The PostScript 3 printer driver does not support the classification codes and it cannot be used to print under environment which the classification codes are required.

For the RPCS printer driver:

- Open the printer properties dialog box after creating a document in an application.
- 2. Click the [Print Settings] or [Setup] tab.
- 3. Click [Details...].

If you select [Send to Job Binding] in the [Job type:] box, you cannot enter a classification code.

4. Enter the classification code in the [Classification code:] box, and then click [OK].

This code identifies the user. The classification code can contain up to 32 alphanumeric (a-z, A-Z, 0-9, "-") characters.

- 5. Make any other necessary print settings, and then click [OK].
- 6. A confirmation message appears. Read it, and then click [OK].
- 7. Execute the print command.
- 8. The print job is sent to the printer.

For the PCL printer driver:

- 1. Open the printer properties dialog box after creating a document in an application.
- 2. Click the [Valid Access] tab.
- 3. Enter the classification code in the [Classification Code:] box.

This code identifies the user. The classification code can contain up to 32 alphanumeric (a-z, A-Z, 0-9, "-") characters.

- 4. Make any other necessary print settings, and then click [OK].
- 5. A confirmation message appears. Read it, and then click [OK].
- 6. Execute the print command.
- 7. The print job is sent to the printer.



- The specified classification code is stored in the printer driver.
- To switch between different classification codes, install the printer driver under different names, and specify different classification code for each driver.

■ Reference

- p.20 "Installing the Printer Driver"
- p.58 "Displaying the Printer Driver Settings Screen"

Using the Virtual Printer

This section explains virtual printer functions.

A virtual printer is a pseudo printer that can only be recognized on a network. The virtual printer has various print options, such as feeding tray selection and duplex printing, which you can set in advance. You can also use the interrupt printing function. This function suspends the ongoing job and gives priority to a new job. The optional hard disk must be installed to use this function.

If you use the virtual printer under UNIX, Solaris, and other operating systems, various print functions are possible without having you manually enter usual print commands.

Adding a Virtual Printer

Use this procedure to add a virtual printer.



- Adding a virtual printer requires Administrators privilege. Log on using an account that has Administrators privilege.
- The following Virtual Printer protocols are available: "TCP/IP (Unspecified, Normal)", "TCP/IP (DIPRINT)", "TCP/IP (RHPP)", "TCP/IP (IPDS)", "Apple Talk", and "NetWare".
- 1. Log on to Web Image Monitor as an administrator.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

A list of the available virtual printers appears.

3. Click [Add].

The screen for adding virtual printers appears.

- 4. In [Virtual Printer Name], enter a name for the new printer, and then select the protocol in the [Protocol] list.
- 5. Click [OK].

The virtual printer is added.



- If you select [AppleTalk] or [NetWare] in the [Protocol] list, you cannot specify a virtual printer name.
- You can specify a virtual printer name using up to 47 characters.
- You can add up to 50 virtual printers. After 50 virtual printers have been added, [Add] will no longer be displayed.
- For details about login user names and passwords, see "Using Web Image Monitor".

■ Reference

• p.185 "Using Web Image Monitor"

Changing a Virtual Printer Configuration

Use this procedure to change a virtual printer configuration.

Mportant !

- You must have Administrators privilege to change the configuration of a virtual printer. Log on using an account that has Administrators privilege.
- 1. Log on to Web Image Monitor as an administrator.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

A list of the available virtual printers appears.

- 3. Select the virtual printer whose configuration you want to change, and then click [Change]. If you want to configure this virtual printer for an interrupt printer, select [TCP/IP (Unspecified, Priority)] in the protocol list.
- 4. Change the configuration as required.
- 5. Click [OK].



- For details about virtual printer configuration, see Web Image Monitor Help.
- For details about login user names and passwords, see "Using Web Image Monitor".

■ Reference

• p.185 "Using Web Image Monitor"

Confirming a Virtual Printer Configuration

Use this procedure to confirm a virtual printer configuration.

- 1. Start Web Image Monitor.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

A list of available virtual printers appears.

Select the virtual printer whose configuration details you want to confirm, and then click [Details].

A configuration list for the selected virtual printer appears.



- [Details] is not displayed if you log on to Web Image Monitor as an administrator. To confirm a virtual printer configuration, click [Change].
- For details about login user names and passwords, see "Using Web Image Monitor".

Reference

• p.185 "Using Web Image Monitor"

Deleting a Virtual Printer

Use this procedure to delete a virtual printer.

Mportant (

- You must have Administrators privilege to delete a virtual printer. Log on using an account that has Administrators privilege.
- 1. Log on to Web Image Monitor as an administrator.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

The list of available virtual printers appears.

3. Select the virtual printer that you want to delete, and then click [Delete].

The delete confirmation screen appears.

4. Click [OK].



- You cannot delete this printer's default virtual printer.
- [Delete] appears only if you have already added a virtual printer.
- For details about login user names and passwords, see "Using Web Image Monitor".

■ Reference

• p.185 "Using Web Image Monitor"

Printing Using a Virtual Printer

To print directly from a specified virtual printer, assign the virtual printer in the print command. If you use the interrupt printing function, enter the name of the virtual printer that you configured for interrupt printing. Before printing for the first time, specify the virtual printer you want to use.

1. Log on to Web Image Monitor in administrator mode.

- 2. In the menu area, click [Configuration], and then click [Printer Basic Settings] in the "Printer" category.
- 3. Select [Active] in [Virtual Printer], and then click [OK].
- 4. Send a command from your computer.

lpr

C:\>lpr -S "printer's IP address" [-PVirtual Printer Name] [-ol] \path name\file name

rcp

c:> rcp [-b] \path name\file name [\path name\file name...] printer's host name:["Virtual Printer Name"]

ftp

ftp> put \path name \ file name Virtual Printer Name



- When the ongoing job meets any of the following conditions, interrupt printing is not possible even if
 you print with the virtual printer that is configured for interrupt printing. The printer waits to print a new
 job until it finishes printing the current job.
 - When the staple function is specified for the ongoing print jog
 - · When the ongoing print job is performed using the bypass tray
 - When a function related to cover or slip paper is specified for the ongoing print job
- If a large amount of memory is used for the ongoing print job or a large number of sheets are being
 printed, there may not be enough memory to process an interrupt print job, or only part of the interrupt
 job may be printed. If this happens, certain functions for the interrupt job, such as stapling or storing
 data onto the printer, can be canceled or sheets can be sorted in a number smaller than the standard
 maximum capacity.
- For details about login user names and passwords, see "Using Web Image Monitor".

■ Reference

p.185 "Using Web Image Monitor"

Memory Capacity and Paper Size

Additional memory apart from the standard memory may be required depending on the paper size and data type.



 When printing from the bypass tray, duplex printing will not be supported regardless of the memory capacity, and only one-side will be printed.

One-sided printing (1200 × 600 dpi)

Memory Capacity	Printable paper sizes
256 MB (standard)	A4, B5 JIS, A5, 8 ¹ / ₂ " × 14", 8 ¹ / ₂ " × 11", Postcard sized paper, 120 × 235 mm (47.3 × 92.6 inches), 160 × 356 mm (63.0 × 140.2 inches), 140 × 900 mm (55.2 × 354.4 inches) *1
384 MB (standard and 128 MB)	A4, B5 JIS, A5, 8 ¹ / ₂ " × 14", 8 ¹ / ₂ " × 11", Postcard sized paper, 120 × 235 mm (47.3 × 92.6 inches), 160 × 356 mm (63.0 × 140.2 inches), 140 × 900 mm (55.2 × 354.4 inches)
512 MB (standard and 256 MB)	A4, B5 JIS, A5, 8 ¹ / ₂ " × 14", 8 ¹ / ₂ " × 11", Postcard sized paper, 120 × 235 mm (47.3 × 92.6 inches), 160 × 356 mm (63.0 × 140.2 inches), 140 × 900 mm (55.2 × 354.4 inches)

^{*1} The paper size may not be printed, depending on the printing data.

Duplex printing (1200 × 600 dpi)

Memory Capacity	Printable paper sizes
256 MB (standard)	A4 *1, B5 JIS, A5, 8 ¹ / ₂ " × 14" *1, 8 ¹ / ₂ " × 11 " *1
384 MB (standard and 128 MB)	A4, B5 JIS, A5, 8 ¹ / ₂ " × 14", 8 ¹ / ₂ " × 11"
512 MB (standard and 256 MB)	A4, B5 JIS, A5, 8 ¹ / ₂ " × 14", 8 ¹ / ₂ " × 11"

^{*1} The paper size may not be printed, depending on the printing data

If Error Occurs with the Specified Paper Size and Type

This section gives instructions for operating the printer when there is no tray for the selected paper size or type, or when paper loaded in the printer has run out.



- The tray cannot be changed if the following functions are set:
 - Duplex Print to a tray that does not support duplex printing
 - Cover Sheet
 - Slip Sheet



- If form feed is selected for a tray with the following settings, you can change the tray by canceling
 the settings:
 - Duplex Print
 - Staple
- If [Auto Continue] is selected, form fed paper is printed after a set interval. For details, see System Menu.

■ Reference

p.149 "System Menu"

Printing from a Selected Tray

If the printer does not have a tray for the selected paper size or paper type, or if the selected paper loaded in the printer has run out, a caution message appears. If this message appears, do the following procedure.

- 1. Press the [Form Feed] key, and then select the paper tray on the screen.
- 2. Select the tray for form feed using the [♠] or [▼] key from those that appear on the display panel, and then press the [# Enter] key.

The printer prints using the selected tray.



• If a tray with a smaller paper size is selected, the print job may be cut short, or other problems may

Canceling a Print Job

Follow this procedure for canceling the print job if the message prompting form feed appears.

1. Press the [Job Reset] key.

The "Job Reset?" screen appears.

2. Select the current job or all jobs (including the current job) using the [▲] or [▼] key.

Job Reset? Current Job

It is also possible to annul the cancellation. Printing resumes if you select [Resume Print], and then press the [# Enter] key

3. Press the [# Enter] key.

The confirmation message appears.

Reset current Job?

Printing resumes if you press the [Escape] key after the message appears.

4. Press the [# Enter] key.

The job is canceled. When the cancellation procedure is complete, a message appears.



- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.
- Under Windows, If the printer is connected to the computer using a parallel cable, sent print jobs may
 be canceled if the [Job Reset] key is pressed while "Waiting for print data..." is displayed on the control
 panel. After the interval set in [I/O Timeout] in [Host Interface] has passed, the next print job can be
 sent. A print job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press the [Job Reset] key.
- A print job containing a large volume of data may take considerable time to stop.

• To stop data printing, see "Canceling a Print Job".

■ Reference

• p.122 "Canceling a Print Job"

3. Printing Stored Documents

This chapter explains how to print documents stored in the machine.

Printing from the Print Job Screen

This section gives instruction about Sample Print, Locked Print, Hold Print, and Stored Print.

Sample Print

Use this function to print only the first set of a multiple-set print job. After you have checked the result, remaining sets can be printed or canceled using the printer's control panel. This can reduce misprints due to mistakes in content or settings.



- A Sample Print file cannot be stored if:
 - the optional hard disk is not installed in the printer.
 - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
 - the file contains over 1,000 pages.
 - sent or stored files in the printer contain over 9,000 pages in total.



- If a Sample Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Del. Temp] or [Auto Del.Stored] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. By
 default, Sample Print jobs are automatically collated by the printer driver. If a collate option is selected
 from the application's Print dialog box, more prints than intended may be produced.
- If the first set of the Sample Print files is not as you expected and you do not want to print remaining sets, delete the Sample Print file using the display panel. If you print the remaining sets of the Sample Print file, the job in the printer is deleted automatically.
- Sample Print files printed or deleted using Web Image Monitor, after you select [Sample Print] using
 the control panel will appear on the display panel. However, an error message will appear if you try
 to print or delete those Sample Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display
 panel may be difficult. Print the file you want to print either by checking the user ID or the time the file
 is sent, or by changing the file name to something that can be recognized easily.
- For details about the error log on the display panel, see "Checking the Error Log".

• For details about [Auto Del. Temp] and [Auto Del. Stored], see "Maintenance Menu".

Reference

- p.132 "Checking the Error Log"
- p.145 "Maintenance Menu"

Printing a Sample Print file

The following procedure describes how to print a Sample Print file with the PCL 6/5e, RPCS or PostScript 3 printer driver.



• Applications with their own drivers, such as PageMaker, do not support this function.

Sending a Sample Print file

1. From an application, select a command to print.

The Print dialog box appears.

2. Select the printer you want to use in the Name list, and then click [Properties].

The printer properties dialog box appears.

3. In the [Job type:] box, click [Sample Print].

When printing with the PostScript 3 printer driver, click [Sample Print] in the [Job Type:] box on the [Job Log] tab.

4. Click [Details...], and then enter a user ID in the [User ID:] box.

This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

5. Execute a command to print.

Make sure to set more than two copies.

The Sample Print job is sent to the printer, and the first set is printed.

Printing a selected Sample Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Sample Print], and then press the [# Enter] key.

Menu: Sample Print

3. Press the [♥] or [♠] key to display [Print One File], and then press the [# Enter] key

A list of Sample Print files stored in the printer appears.

Press the [▼] or [▲] key to display the file you want to print, and then press the [# Enter] key.

Enter the number of sets you want to print using the [▲] or [▼] keys, and then press the [# Enter] key.

You can enter up to 999 sets.

6. Press the [Escape] key 1-4 times.

The initial screen appears.

Printing all Sample Print files

Press the [Menu] key.
 The [Menu] screen appears.

2. Press the $[\P]$ or [A] key to display [Sample Print], and then press the [H] Enter] key.

3. Press the [▼] or [▲] key to display [Print All Files], and then press the [# Enter] key.

The user ID when the job was stored appears.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

5. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

Enter the number of sets you want to print using the [▲] or [▼] keys, and then press the [# Enter] key.

You can enter up to 999 sets.

7. Press the [Escape] key 1-4 times.

The initial screen appears.



 When multiple files are selected without setting a quantity, one set less than the minimum number of all settings is applied. If the least number of settings is one set, all selected files will be printed at one set.

- When the number of set quantity is changed, the changed quantity is applied to all selected files.
- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.

Deleting Sample Print files

If you are not satisfied with the sample printout, you can delete the Sample Print file, revise it and print it again until the settings are suitable.

Deleting a selected Sample Print file only

- Press the [Menu] key.
 The [Menu] screen appears.
- 2. Press the [▼] or [▲] key to display [Sample Print], and then press the [# Enter] key.

```
Menu:
Sample Print
```

3. Press the [♥] or [♠] key to display [Delete One File], and then press the [# Enter] key.

```
Sample Print:
Delete One File
```

The file name and the time when the job was stored appear.

Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

```
Select File:
06:19PM user001
```

To cancel deleting a Sample Print file, press the [Escape] key.

5. Check the file you want to delete is displayed, and then press the [# Enter] key.

```
06:19PM user001
Press# to delete
```

The "Deleted" message appears. Then the file selection screen reappears.

6. Press the [Menu] key.

The initial screen appears.

Deleting all Sample Print files

Press the [Menu] key.
 The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Sample Print], and then press the [# Enter] key.

Menu: Sample Print

3. Press the [♥] or [♠] key to display [Del. All Files], and then press the [# Enter] key.

Sample Print: Del. All Files

The user ID when the job was stored appear.

 Press the [♥] or [♠] key to display the user ID for the file you want to delete, and then press the [# Enter] key.

Select User ID: user001

To cancel deleting a Sample Print file, press the [Escape] key.

5. The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press# to delete

The "Deleted" message appears. Then the file selection screen reappears.

6. Press the [Menu] key.

The initial screen appears.

Locked Print

Use this function to maintain privacy when printing confidential documents on the printer over a shared network. Usually, it is possible to print data using the display panel once it is stored in this printer. When using Locked Print, it is not possible to print unless a password is entered on the printer's display panel. Your confidential documents will be safe from being viewed by other people.

Mportant !

- A Locked Print file cannot be stored if:
 - the optional hard disk is not installed in the printer.
 - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
 - the file contains over 1,000 pages.
 - sent or stored files in the printer contain over 9,000 pages in total.



- If a Locked Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents remain. However, the [Auto Del. Temp] or [Auto Del. Stored] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. Locked
 Print jobs are automatically collated by the printer driver as default. If a collate option is selected in
 the application print dialog box, more sets than intended may be printed.
- After the Locked Print file is printed, the job is automatically deleted.
- Locked Print files printed or deleted using Web Image Monitor, after you select [Locked Print] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Locked Print files.
- For details about the error log on the display panel, see "Checking the Error Log".
- For details about [Auto Del. Temp] and [Auto Del. Stored], see "Maintenance Menu".

Reference

- p.132 "Checking the Error Log"
- p.145 "Maintenance Menu"

Printing a Locked Print file

The following procedure describes how to print a Locked Print file with the PCL 6/5e, RPCS or PostScript 3 printer driver.



Applications with their own drivers, such as PageMaker, do not support this function.

Sending a Locked Print file

1. From an application, select a command to print.

The [Print] dialog box appears.

2. Select the printer you want to use in the [Name] list, and then click [Properties].

The [Printer Properties] dialog box appears.

3. In the [Job type:] box, click [Locked Print].

When printing with the PostScript 3 printer driver, click [Locked Print] in the [Job Type:] box on the [Job Log] tab.

4. Click [Details...], and then enter a User ID in the [User ID:] box.

This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

- 5. In the [Password:] box, enter a four to eight digit password (0-9).
- 6. Execute a command to print.

The job is saved on the hard disk.

Printing a selected Locked Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Locked Print], and then press the [# Enter] key.

Menu: Locked Print

3. Press the $[\,^{\blacktriangledown}]$ or $[\,^{\blacktriangle}]$ key to display [Print One File], and then press the $[\,^{\bigstar}]$ Enter] key.

Locked Print: Print One File

The file name and the time when the job was stored appear.

Press the [▼] or [▲] key to display the file you want to print, and then press the [# Enter] key.

Select File: 06:23PM user001

The password screen appears.

5. Enter the password using the [▼] or [▲] key, and then press the [# Enter] key.

Password ***

If you forget your password, ask your administrator for help.

Check that the file you want to print is displayed

To cancel printing, press the [Escape] key.

6. Press the [# Enter] key.

06:23PM user001 Press # to set

7. Press the [Escape] key 1-4 times.

To print, press [Esc] 1-4 times

The initial screen appears.

Printing all Locked Print file

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Locked Print], and then press the [# Enter] key.

Menu: Locked Print

3. Press the [▼] or [▲] key to display [Print All Files], and then press the [# Enter] key.

Locked Print: Print All Files

The user ID when the job was stored appears.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

```
Select User ID:
user001
```

The password screen appears.

5. Enter the password using the [▼] or [▲] key, and then press the [# Enter] key.

```
Password
****
```

If you forget your password, ask your administrator for help.

6. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

```
No. of Files 1
Press # to set
```

The printer prints files that correspond to the entered password. The number of files to be printed is displayed on the confirmation screen.

To print files that do not correspond to the entered password, repeat the procedure and specify the appropriate password.

7. Check the file you want to print is displayed, and then press the [# Enter] key.

```
Select File:
06:23PM user001
```

8. Press [Escape] key 1-4 times.

```
To print, press
[Esc] 1-4 times
```

The initial screen appears.

3





- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- You can change a password after sending files to the printer using Web Image Monitor. For details about changing the password, consult your administrator.

Deleting Locked Print files

Deleting a selected Locked Print file only

Press the [Menu] key.
 The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Locked Print], and then press the [# Enter] key.

Menu: Locked Print

3. Press the [♥] or [♠] key to display [Delete One File], and then press the [# Enter] key.

Locked Print: Delete One File

The file name and the time when the job was stored appear.

Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

Select File: 06:42PM user001

The password screen appears.

5. Enter the password using the [▼] or [▲] key, and then press the [# Enter] key.

Password **** If you forget your password, ask your administrator for help.

6. Check the file you want to delete is displayed, and then press the [# Enter] key.

06:42PM user001 Press# to delete

The "Deleted" message appears.

7. Press the [Menu] key.

The initial screen appears.

Deleting all Locked Print files

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Locked Print], and then press the [# Enter] key.

Menu:

Locked Print

3. Press the [♥] or [♠] key to display [Del. All Files], and then press the [# Enter] key.

Locked Print: Del. All Files

The user ID when the job was stored appear.

4. Press the [▼] or [▲] key to display the user ID for the file you want to delete, and then press the [# Enter] key.

Select User ID: user001

The password screen appears.

To cancel deleting a Locked Print file, press the [Escape] key.

3

5. Enter the password using the [♥] or [▲] key, and then press the [# Enter] key.

Password ****

If you forget your password, ask your administrator for help.

The printer deletes files that correspond to the entered password. The number of files to be deleted is displayed on the confirmation screen.

The printer deletes documents that correspond to the entered password. To delete documents that do not correspond to the entered password, repeat the procedure and specify the appropriate password.

The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press# to delete

The "Deleted" message appears.

7. Press the [Menu] key.

The initial screen appears.

Hold Print

Use this function to temporarily hold a file in the printer, and print it from the computer or the printer's control panel later.



- A Hold Print file cannot be stored if:
 - the optional hard disk is not installed in the printer.
 - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
 - the file contains over 1,000 pages.
 - sent or stored files in the printer contain over 9,000 pages in total.



- If a Hold Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Del. Temp] or [Auto Del.Stored] settings are applied first.

- If the application has a collate option, make sure it is not selected before sending a print job. By
 default, Hold Print jobs are automatically collated by the printer driver. If a collate option is selected
 from the application's Print dialog box, more prints than intended may be produced.
- Hold Print files printed or deleted using Web Image Monitor, after you select [Hold Print] using the
 control panel will appear on the display panel. However, an error message will appear if you try to
 print or delete those Hold Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily. If you enter the document name on the printer driver's [Details...], that name appears on the display panel.
- It is possible, but not required, to set a file name or a password to a Hold Print file.
- For details about the error log on the display panel, see "Checking the Error Log".
- For details about [Auto Del. Temp] and [Auto Del. Stored], see "Maintenance Menu".

Reference

- p.132 "Checking the Error Log"
- p.145 "Maintenance Menu"

Printing a Hold Print file

The following procedure describes how to print a Hold Print file with the PCL 6/5e or RPCS printer driver.

Mportant (

• Applications with their own drivers, such as PageMaker, do not support this function.

Sending a Hold Print file

1. From an application, select a command to print.

The [Print] dialog box appears.

2. Select the printer you want to use in the [Name] list, and then click [Properties].

The [Printer Properties] dialog box appears.

3. In the [Job type:] box, click [Hold Print].

When printing with the PostScript 3 printer driver, click [Hold Print] in the [Job Type:] box on the [Job Log] tab.

4. Click [Details...], and then enter a User ID in the [User ID:] box.

This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

You can also set a file name.

5. Execute a command to print.

Make sure to set more than two copies.

The Hold Print job is sent to the printer.

Printing a selected Hold Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] to display key [Hold Print], and then press the [# Enter] key.

Menu:

Hold Print

3. Press the [▼] or [▲] to display key [Print One File], and then press the [# Enter] key.

Hold Print:

Print One File

The file name and the time when the job was stored appear.

4. Press the [♥] or [♠] key to display the file you want to print, and then press the [# Enter] key.

Select File:

06:51PM user001

To cancel printing, press the [Escape] key.

5. Press the [# Enter] key.

06:51PM user001

Press # to set

6. Press [Escape] key 1-4 times.

To print, press
[Esc] 1-4 times

The initial screen appears.

Printing all Hold Print files

Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Hold Print], and then press the [# Enter] key.

Menu: Hold Print

3. Press the [▼] or [▲] key to display [Print All Files], and then press the [# Enter] key.

Hold Print: Print All Files

The user ID when the job was stored appear.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

Select User ID: user001

5. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press # to set

6. Check the file you want to print is displayed, and then press the [# Enter] key.

06:51PM user001 Press # to set

7. Press the [Escape] key 1-4 times.

The initial screen appears.



- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about setting printer drivers, see the printer driver Help. You can also print or delete a Hold Print file from Web Image Monitor. For details, see Web Image Monitor Help.

Deleting Hold Print files

Deleting a selected Hold Print file only

Press the [Menu] key.
 The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Hold Print], and then press the [# Enter] key.

```
Menu:
Hold Print
```

Press the [▼] or [▲] key to display [Delete One File], and then press the [# Enter] key.

```
Hold Print:
Delete One File
```

The file name and the time when the job was stored appear.

Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

```
Select File:
06:50PM user002
```

To cancel deleting a Hold Print file, press the [Escape] key.

5. Check the file you want to delete is displayed, and then press the [# Enter] key.

06:50PM user002 Press# to delete

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.

Deleting all Hold Print files

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Hold Print], and then press the [♯ Enter] key.

Menu:

Hold Print

3. Press the [♥] or [♠] key to display [Del. All Files], and then press the [# Enter] key.

Hold Print: Del. All Files

The user ID when the job was stored appear.

4. Press the [▼] or [▲] key to display the user ID for the file you want to delete, and then press the [# Enter] key.

Select User ID: user001

To cancel deleting a Hold Print file, press the [Escape] key.

3

The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press# to delete

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.

Stored Print

Use this function to store a file in the printer, and then print it from the computer or the printer's control panel later.

Jobs are not deleted after they are printed, so the same job need not be resent in order to print multiple copies.



- A Stored Print file cannot be stored if:
 - the optional hard disk is not installed in the printer.
 - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
 - the file contains over 1,000 pages.
 - sent or stored files in the printer contain over 9,000 pages in total.



- If a Stored Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Del. Temp] or [Auto Del.Stored] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. By
 default, Stored Print jobs are automatically collated by the printer driver. If a collate option is selected
 from the application's Print dialog box, more prints than intended may be produced.
- Stored Print files printed or deleted using Web Image Monitor, after you select [Stored Print] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Stored Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily.

- If you enter the document name on the printer driver's [Details...], that name appears on the display panel.
- For details about the error log on the display panel, see "Checking the Error Log".
- For details about [Auto Del. Temp] and [Auto Del. Stored], see "Maintenance Menu".

Reference

- p.132 "Checking the Error Log"
- p.145 "Maintenance Menu"

Printing a Stored Print file

The following procedure describes how to print a Stored Print file with the PCL 6/5e or RPCS printer driver.



• Applications with their own drivers, such as PageMaker, do not support this function.

Sending a Stored Print file

1. From an application, select a command to print.

The [Print] dialog box appears.

- 2. Select the printer you want to use in the [Name] list, and then click [Properties].
- 3. Start printing from the application's [Print] dialog box.

You can select two ways for Stored Print:

• [Stored Print]

Stores the file in the printer and print it later using the control panel.

• [Store and Normal Print]

Prints the file at once and also stores the file in the printer.

For details about configuring the printer drivers, see the relevant Help files.

4. Click [Details...], and then enter a User ID in the [User ID:] box.

You can also set a password. The same password must be entered when printing or deleting.

You can set a file name.

5. Execute a command to print.

The Stored Print job is sent to the printer and stored.

Printing a selected Stored Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Stored Print], and then press the [# Enter] key.

Menu: Stored Print

3. Press the [▼] or [▲] key to display [Print One File], and then press the [# Enter] key.

Stored Print: Print One File

The file name and the time when the job was stored appear.

To cancel printing, press the [Escape] key.

Press the [▼] or [▲] key to display the file you want to print, and then press the [# Enter] key.

Select File: 07:04PM user001

If you set a password in the printer driver, a password confirmation screen appears. Enter the password.

 Enter the number of sets you want to print using the [▲] or [▼] keys, and the press the the [# Enter] key.

Qty 1(1-999) Set Qty/Press #

You can enter up to 999 sets.

6. Press the [Escape] key1-4 times.

To print, press [Esc] 1-4 times

The initial screen appears.

Printing all Stored Print files

1. Press the [Menu] key.

The [Menu] screen appears.

Press the [▼] or [▲] key to display [Stored Print], and then press the [# Enter] key.

Menu: Stored Print

3. Press the [♥] or [♠] key to display [Print All Files], and then press the [# Enter] key.

Stored Print: Print All Files

The user ID when the job was stored appear.

 Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

Select User ID: user001

5. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press # to set

Enter the number of sets you want to print using the [▲] or [▼] keys, and then press the [# Enter] key.

Qty 1(1-999) Set Qty/Press #

You can enter up to 999 sets.

7. Press the [Escape] key 1-4 times.

The initial screen appears.



- When the number of set quantity is changed, the changed quantity is applied to all selected files.
- To stop printing after printing has started, press the [Job Reset] key. A Stored Print file is not deleted
 even if the [Job Reset] key is pressed.
- The Stored Print file that sent to the printer is not deleted unless you delete a file or select [Auto Del.Stored].
- You can change a password after sending files to the printer using Web Image Monitor. For details
 about changing the password, consult your administrator.
- For details about setting printer drivers, see the printer driver Help. You can also print or delete a Stored Print file from Web Image Monitor. For details, see Web Image Monitor Help.
- For details about the [Auto Del.Stored], see "Maintenance Menu".



• p.145 "Maintenance Menu"

Deleting stored print files

Deleting a selected Stored Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

Press the [▼] or [▲] key to display [Stored Print], and then press the [# Enter] key.

Menu: Stored Print

3. Press the [▼] or [▲] key to display [Delete One File], and then press the [# Enter] key.

Stored Print: Delete One File

The file name and the time when the job was stored appear.

Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

Select File: 07:12PM user001

To cancel deleting a Stored Print file, press the [Escape] key.

If you set the password in the printer driver, enter the password to delete.

If you forget your password, ask your administrator for help.

5. Check the file you want to delete is displayed, and then press the [# Enter] key.

07:12PM user001 Press# to delete

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.

Deleting all Stored Print files

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Stored Print], and then press the [♯ Enter] key.

Menu: Stored Print

3. Press the [▼] or [▲] key to display [Del. All Files], and then press the [♯ Enter] key.

Stored Print: Del. All Files

The user ID when the job was stored appear.

4. Press the [♥] or [♠] key to display the user ID for the file you want to delete, and then press the [# Enter] key.

To cancel deleting a Stored Print file, press the [Escape] key.

If you set the password in the printer driver, enter the password to delete.

If you forget your password, ask your administrator for help.

5. The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.



If a password is assigned to the file, the password screen appears. Enter the password. The machine
deletes files that correspond to the entered password and files that do not require a password. To
delete files that do not correspond to the entered password, repeat the procedures and specify the
appropriate password.

Canceling a Print Job

You can cancel printing from either the printer or a client computer. Since canceling procedures vary depending on the print job status, check the job status and cancel printing according to the following procedure.

Canceling a Print Job Using the Control Panel

1. Press the [Job Reset] key.

A confirmation message appears.

2. Press the [# Enter] key.

Job Reset? Current Job

To resume printing jobs, press the $[\P]$ or [A] key to display [Resume Print], and then press the [H] Enter] key.

3. Press the [# Enter] key to cancel the print job.

Press the [Escape] key to return to the previous display.

Windows - Canceling a Print Job from the computer

You can cancel a print job from the computer if transferring print jobs is not completed.

1. Double-click the printer icon on the Windows task tray.

A window appears, showing all print jobs currently queued for printing. Check the current status of the job you want to cancel.

- 2. Select the name of the job you want to cancel.
- 3. On the [Document] menu, click [Cancel].



- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.
- If the printer is connected to the computer using a parallel cable, sent print jobs may be canceled if
 the [Job Reset] key is pressed while "Waiting for print data..." is displayed on the control panel. After
 the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print
 job sent from a different client computer will not be canceled in this case.

3

- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press the [Job Reset] key.
- A print job containing a large volume of data may take considerable time to stop.

Mac OS - Canceling a Print Job from the computer

1. Double-click the printer icon on the desktop.

A window appears showing all print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.

Under Mac OS X, start Print Center.

- 2. Select the name of the job you want to cancel.
- 3. Click the pause icon, and then click the trash icon.



- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.
- If the printer is connected to the computer using a parallel cable, sent print jobs may be canceled if
 the [Job Reset] key is pressed while "Waiting for print data..." is displayed on the control panel. After
 the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print
 job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue
 for a few pages after you press the [Job Reset] key.
- A print job containing a large volume of data may take considerable time to stop.

4. Making Printer Settings Using the Control Panel

This chapter explains the menu displayed on the control panel and how to change the printer's settings.

Menu Chart

This section explains how to change the default settings of the printer and provides information about the parameters included in each menu.

Mem. Erase Info

Displays data information inside the memory.

This menu can be selected only when the optional Data overwrite security unit is installed.

Sample Print

Menu
Print One File
Print All Files
Delete One File
Del. All Files
Error File(s)



- This menu appears only if the optional hard disk is installed.
- The most recent 30 errors are stored in the [Error File(s)]. If a new error is added when there are 30 errors already stored, the oldest error is deleted. However, if the oldest error belongs to one of the following print jobs, it is not deleted. The error is stored separately until the number of those errors reaches 30. You can check any of these print jobs for error log information.
 - Sample Print
 - Locked Print
 - Hold Print
 - Stored Print
- If the main power switch is turned off, the log is deleted.

Locked Print

Same as the [Sample Print] menu.

Same as the [Sample Print] menu.

Stored Print

Same as the [Sample Print] menu.

Paper Input

Menu
Bypass Size
Tray Paper Size
Paper Type
Duplex Setting
Aut.Tray Select
Tray Priority

UNote

• [Duplex Setting] appears when the optional duplex unit is installed.

List/Test Print

Menu
Multiple Lists
Config. Page
Error Log
Network Summary
Menu List
PCL Config.Page
PS Config. Page
PDF Config.Page
IPDS Font List
Hex Dump

4



• [IPDS Font List] appears only when the optional IPDS unit is installed.

Maintenance

Menu
Image Density
Registration
Curl Prevention
Del. All Temp
Del. All Stored
HD Format
Reset IPDS Fonts
Date/Time
WL.LAN Signal
WL.LAN Defaults
Panel Key Sound
Warm-Up Beeper



- [Del. All Temp], [Del. All Stored], and [HD Format] appears when the optional hard disk is installed.
- [WL.LAN Signal] and [WL.LAN Defaults] appears when the optional Wireless LAN interface unit is installed.
- [Reset IPDS Fonts] appears only when the optional IPDS unit is installed.

System

Menu
Prt. Err Report
Auto Continue
Memory Overflow

Menu
Copies
Printer Lang.
Sub Paper Size
Page Size
Edge-Edge Print
Def.Print Lang.
Duplex
Blank Pages
Rotate 180 Deg.
Energy Saver
Auto Reset Time
Auto Del. Temp
Auto Del.Stored
Compressed Data
Memory Usage
Unit of Measure
Edge Smoothing
Toner Saving
Spool Printing
Letterhead Mode
Bypass Priority
Tray Switching
Auto Tray SW
RAM Disk
Auto Email Ntfy



- [Auto Del. Temp] [Auto Del. Stored] [Spool Printing] appears when the optional hard disk is installed.
- [RAM Disk] appears only when the optional hard disk is not installed.

Host Interface

Menu
I/O Buffer
I/O Timeout
Network Setup
Parallel I/F
Wireless LAN
Fixed USB Port



- [Parallel I/F] appears when the optional IEEE 1284 interface unit is installed.
- [Wireless LAN] appears when the optional Wireless LAN interface unit is installed.

PCL Menu

Menu
Orientation
Form Lines
Font Source
Font Number
Point Size
Font Pitch
Symbol Set
Courier Font
Ext. A4 Width
Append CR to LF

	Menu
Resolution	

PS Menu

Menu
Job Timeout
Wait Timeout
Data Format
Resolution

PDF Menu

Menu
PDF: Change PW
PDF Group PW
Resolution

IPDS Menu

Menu
Tray Form
Emulation Mode
Print Mode
Def. Code Page
Default FGID
Chara. Per Inch
Valid Prnt.Area
Page
Edge to Edge

Menu
Font Substitut.
Caching
Font Capture
Resolution
Graph.Char.Str.
Bar Code
Box Draw
Clr. Simulation
Text Color Sim.
Tray Mapping



• [Font Capture] appears when the optional hard disk is installed.

Shutdown

Prepare the printer for power off. To prevent loss of stored data, be sure to shutdown the printer properly before turning off the power switch.



• For details, see "Turning Off the Power", Hardware Guide.

Language

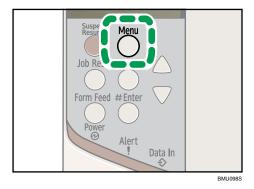
Menu
English
German
French
Italian
Dutch
Swedish
Norwegian

Menu
Danish
Spanish
Finnish
Portuguese
Czech
Polish
Hungarian
Russian

Checking the Error Log

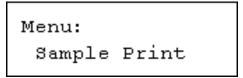
If files could not be stored due to printing errors, identify the cause of the errors by checking the error log on the control panel.

1. Press the [Menu] key.



The [Menu] screen appears.

2. Press the [▲] or [▼] key to display the print type you want to check, and then press the [# Enter] key.



3. Press the [♠] or [♥] key to display [Error File(s)], and then press the [# Enter] key.

4. Press the [▲] or [▼] key to check the log.



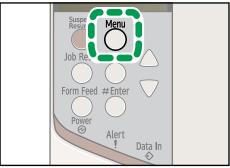
- Press the [Menu] key until the initial screen appears after checking the log.
- To print files that appear in the error log, resend them after stored files have been printed or deleted.

Memory Erase Info Menu

Displays data status inside the memory.



- The Memory Erase Info menu appears only when the optional Data overwrite security unit is installed.
- 1. Press the [Menu] key.



BMU098

The menu screen appears.

2. Press the [♠] or [♥] key to display [Mem. Erase Info], and then press the [# Enter] key.

Menu: Mem. Erase Info

3. The current memory status is displayed.

[Data to erase remaining.]: Data remain inside the memory.

[Currently no data to erase.]: No data remain inside the memory.

[Erasing Data...]: Data are being deleted.

4. Press the [# Enter] key.

The menu screen appears.

5. Press the [Menu] key.

The initial screen appears.

4

Paper Input Menu

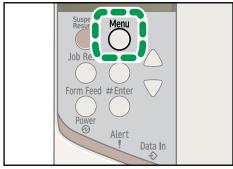
This section explains about paper settings on the paper input menu such as paper sizes and types on each tray.

Changing the Paper Input Menu

Automatic tray selection

Follow the procedure below to change the automatic tray selection setting.

1. Press the [Menu] key.



BMU098S

The menu screen appears.

2. Press the [♠] or [♥] key to display [Paper Input], and then press the [♯ Enter] key.

Menu: Paper Input

3. Press the [▲] or [▼] key to display [Aut.Tray Select], and then press the [# Enter] key.

Paper Input: Aut.Tray Select 4. Press the [▲] or [▼] key to display the tray you want to select, and then press the [# Enter]

Aut. Tray Select: Tray 1

5. Press the [▲] or [▼] key to display [On], and then press the [# Enter] key.

Tray 1: *On

Wait for one second. The [Aut.Tray Select] screen appears.

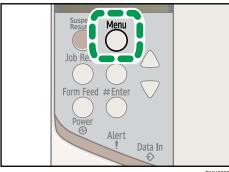
6. Press the [Menu] key.

The initial screen appears.

Tray priority

Follow the procedure below to change the tray priority.

1. Press the [Menu] key.



BMI IN985

The menu screen appears.

2. Press the [♠] or [♥] key to display [Paper Input], and then press the [# Enter] key.

Menu: Paper Input

3. Press the [▲] or [▼] key to display [Tray Priority], and then press the [# Enter] key.

Paper Input: Tray Priority

4. Press the [♠] or [♥] key to select a tray you want to use, and then press the [# Enter] key.

Tray Priority: *Tray 1

Wait for one second. The [Paper Input] screen appears.

5. Press the [Menu] key.

The initial screen appears.

Paper Input Menu Parameters

This section explains about parameters that can be set on the paper input menu.

Bypass Size

You can specify the paper size for Bypass Tray.

220-240V

A4 (210 × 297), A5 (148 × 210), A5 (148 × 210), A6 (105 × 148), B5 JIS (182 × 257), C5 Env (162 × 229), C6 Env (114 × 162), DL Env (110 × 220), $8^{1}/_{2}$ × 14, $8^{1}/_{2}$ × 13, $8^{1}/_{2}$ × 11, $8^{1}/_{4}$ × 13, 8×13 , $7^{1}/_{4}$ × $10^{1}/_{2}$, $5^{1}/_{2}$ × $8^{1}/_{2}$, $8^{1}/_{2}$ × $5^{1}/_{2}$, $4^{1}/_{8}$ × $9^{1}/_{2}$, $3^{7}/_{8}$ × $7^{1}/_{2}$, 16K(195 × 267), Custom Size

120V

 $8^{1}/_{2} \times 14$, $8^{1}/_{2} \times 13$, $8^{1}/_{2} \times 11$, $8^{1}/_{4} \times 13$, 8×13 , $7^{1}/_{4} \times 10^{1}/_{2}$, $5^{1}/_{2} \times 8^{1}/_{2}$, $8^{1}/_{2} \times 5^{1}/_{2}$, $4^{1}/_{8} \times 9^{1}/_{2}$, $3^{7}/_{8} \times 7^{1}/_{2}$, A4 (210 × 297), A5 (148 × 210), A5 (148 × 210), A6 (105 × 148), B5 JIS (182 × 257), C5 Env, C6 Env, DL Env, 16K(195 × 267), Custom Size

U Note

- **220-240V** Default: A4 (210 × 297)
- **120V** Default: $8^{1}/_{2} \times 11$

Tray Paper Size

Tray 1

You can specify the paper size for Tray 1.

220-240V

A5 (148 × 210), $8^{1}/_{2}$ × 13, $8^{1}/_{4}$ × 13, 8 × 13, $5^{1}/_{2}$ × $8^{1}/_{2}$, 16K (195 × 267), Custom Size

120V

 $8^{1}/_{2} \times 13$, $8^{1}/_{4} \times 13$, 8×13 , $5^{1}/_{2} \times 8^{1}/_{2}$, A5 (148 × 210), 16K (195 × 267), Custom Size

U Note

- **220-240V** Default: A5 (148 × 210)
- **120V** Default: 8 × 13

Tray 2, Tray 3

You can specify the paper size for Tray 2 and Tray 3.

220-240V

C5 Env (162 × 229), C6 Env (114 × 162), DL Env (110 × 220), $8^{1}/_{2}$ × 13, $8^{1}/_{4}$ × 13, 8 × 13, $7^{1}/_{4}$ × $10^{1}/_{2}$, $4^{1}/_{8}$ × $9^{1}/_{2}$, $3^{7}/_{8}$ × $7^{1}/_{2}$, 16K (195 × 267), Custom Size

120V

 $8^{1}/_{2} \times 13$, $8^{1}/_{4} \times 13$, 8×13 , $7^{1}/_{4} \times 10^{1}/_{2}$, $4^{1}/_{8} \times 9^{1}/_{2}$, $3^{7}/_{8} \times 7^{1}/_{2}$, C5 Env (162 × 229), C6 Env (114 × 162), DL Env (110 × 220), 16K (195 × 267), Custom Size

U Note

- 220-240V Default: Custom Size
- **120V** Default: 8 × 13

Paper Type

Tray 1

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Thick Paper, +Custom Type 1-8



- Default: Plain Paper
- For details about the type of paper loaded in each tray, see "Paper and Other Media", Hardware Guide.
- Be sure to set a paper type using the control panel. If you do not set it, the printing result
 might not be proper.

Tray 2, Tray 3

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Envelope, Preprinted, Thick Paper, +Custom Type 1-8



- Default: Plain Paper
- For details about the type of paper loaded in each tray, see Hardware Guide.

Be sure to set a paper type using the control panel. If you do not set it, the printing result
might not be proper.

Bypass Tray

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Transparency, Envelope, Preprinted, Thick Paper, +Custom Type 1-8



- Default: Plain Paper
- For details about the type of paper loaded in each tray, see Hardware Guide.
- Be sure to set a paper type using the control panel. If you do not set it, the printing result
 might not be proper.

Duplex Setting

Tray 1-3, Bypass Tray

Whether duplex printing is done in each tray is set.

- Duplex
- Do not duplex



• Default : Duplex

Aut.Tray Select

Tray 1-3, Bypass Tray

You can select whether to assign each tray to automatically print the paper size and type set by printer driver.



- Default: On
- When using custom size paper, if [On] is selected in [Aut.Tray Select], the size selected on the control panel has priority, if [Off] is selected, the size selected from the printer driver has priority.
- Only installed trays appear on the display panel.
- You can select multiple trays.
- If you need to have a tray locked, you must select the tray using both printer driver and control panel.

Tray Priority

You can set a tray to be checked first when [Aut.Tray Select] is selected from the printer driver. The tray selected here is used when no tray is selected for a print job.



• Default: Tray 1

- Only installed trays appear on the display panel.
- It is recommended that you load paper of the size and orientation you use most frequently in the tray selected in [Tray Priority].



• JIS stands for "Japanese Industrial Standard".

List/Test Print Menu

You can print lists showing configurations on printer or the paper printings.

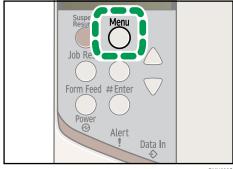
Also, you can check the types and characters of all the printable fonts.

Printing a Configuration Page

Follow the procedure below to print the configuration page.



- The configuration page is printed on A4 or Letter ($8^{1}/_{2}$ " × 11") size paper, so load them in the same
- 1. Press the [Menu] key.



BMU098S

The menu screen appears.

2. Press the [▼] or [▲] key to display [List/Test Print], and then press the [# Enter] key.

```
Menu:
 List/Test Print
```

3. Press the [▼] or [▲] key to display [Config. Page], and then press the [# Enter] key.

After the configuration page is printed out, the screen returns to List/Test print menu.

4. Press the [Menu] key.

The initial screen appears.

Interpreting the Configuration Page

System Reference

Printer ID

Shows the serial number assigned to the board by its manufacturer.

Pages Printed

Shows the total number of pages printed by the printer to date.

Firmware Version

Firmware

Shows the version number of the printer controller firmware.

Engine

Shows the version number of the printer engine firmware.

NCS

Shows the version number of the network interface board.

Device Connection

Shows the names of device options installed in the printer.

HDD:Font/Macro Download

Shows the hard disk status

Printer Language

Shows the version number of the printer language.

Connection Equipment

Shows the options attached to the printer.

Paper Input

Shows the current [Paper Input] settings.

For details, see "Paper Input Menu".

Reference

• p.135 "Paper Input Menu"

Maintenance

Shows the current [Maintenance] settings.

For details, see "Maintenance Menu".



• p.145 "Maintenance Menu"

System

Shows the current [System] settings.

For details, see "System Menu".

■ Reference

• p.149 "System Menu"

PCL Menu

Shows the current [PCL Menu] settings.

For details, see "PCL Menu".

■ Reference

• p.166 "PCL Menu"

PS Menu

Shows the current [PS Menu] settings.

For details, see "PS Menu".

■ Reference

• p.170 "PS Menu"

PDF Menu

Shows the current [PDF Menu] settings.

For details, see "PDF Menu".

■ Reference

• p.173 "PDF Menu"

IPDS Menu

Shows the current [IPDS Menu] settings.

For details, see "IPDS Menu".

Reference

• p.175 "IPDS Menu"

Host Interface

Shows the current [Host Interface] settings.

When DHCP is active on the network, the IPv4 address, subnet mask and gateway address appear in parentheses.

For details, see "Host Interface Menu".

Reference

• p.158 "Host Interface Menu"

Interface information is displayed.

User Paper Type

Registered user paper types are displayed.



• For details, see "Using Paper Types that have Unique Names", Hardware Guide.

List/Test Print Menu Parameters

This section explains about parameters that can be set on the List/Test Print menu.

Multiple Lists

You can print the configuration page and error log, network summary and supply list.

Config. Page

You can print the current configuration of the printer.

Error Log

You can print an error report.

Network Summary

You can print the network device status.

Menu List

You can print a menu list showing all available menus.

PCL Config.Page

You can print the current configuration and installed PCL font list.

PS Config. Page

You can print the current configuration and installed PS font list.

PDF Config.Page

You can print the current configuration and installed PDF font list.

IPDS Font List

You can print a list of IPDS-supported fonts.

Hex Dump

You can print the data sent by the computer using Hex Dump.

Maintenance Menu

You can set printing conditions such as density and calibration, and printer management such as formatting the optional hard disk unit.

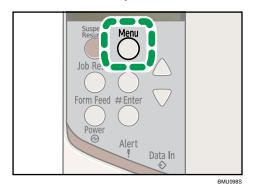
Changing the Maintenance Menu

This section explains changing the Maintenance menu using examples.

HD Format

Follow the procedure below to format the hard disk drive.

1. Press the [Menu] key.



The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Maintenance], and then press the [# Enter] key.

Menu: Maintenance

3. Press the [▼] or [▲] key to display [HD Format], and then press the [# Enter] key.

Maintenance: HD Format

HD Format Press # to start

The hard disk drive is formatted, and the message appears.

5. Press the [# Enter] key.

The [HD Format] screen appears.

6. Press the [Menu] key.

The initial screen appears.

Maintenance Menu Parameters

This section explains about parameters that can be set on the Maintenance menu.

Image Density

You can select the print image density.

-6 to 3



• For details, see "Adjusting the Printer", Hardware Guide.

Registration

You can adjust the starting position of the printing page.

Prt. Test Sheet

You can print the registration test sheet.

Tray 1, Tray 2, Tray 3, Bypass Tray, Duplex Unit



- Only the installed trays appear on the display panel.
- Adjustment

You can select the start position for printing on a page.

Horiz.:Tray 1, Horiz.:Tray 2, Horiz.:Tray 3, Horiz.:Bypass, Horiz.:Dup.Back, Vert.:Std. Tray, Vert.:Opt. Tray, Vert.:Bypass, Vert.:Dup.Back



• Only the installed trays appear on the display panel.

Л

Curl Prevention

You can control the fuser temperature to prevent paper from curling.

- On
- Off



- Default: Off
- Use this mode only when paper misfeed occurs frequently during duplex printing.

Del. All Temp

This appears on the menu only when the hard disk is installed.

Use this function to delete all temporarily saved documents (Sample Print, Locked Print and Hold Print data) at once.

Del. All Stored

This appears on the menu only when the hard disk is installed.

Use this function to delete all saved documents (Stored Print data) at once.

HD Format

Appears when the hard disk is installed.

Reset IPDS Fonts

Use this page to delete all IPDS captured fonts.



• This menu appears only when the optional IPDS unit is installed.

Date/Time

Use this to set the date and time.

WL.LAN Signal

You can check the signal strength when using LAN.

The menu appears when the Wireless LAN interface unit is installed.

WL.LAN Defaults

Reset the wireless LAN to default.

The menu appears when the Wireless LAN interface unit is installed.

Panel Key Sound

You can select whether or not to sound the beeper when the control panel is pressed.

- On
- Off



• Default: On

For details about meaning of the various beep patterns, see "Panel Tone", Hardware Guide.

Warm-Up Beeper

You can select whether or not to sound the beeper when the warming up is completed.

- On
- Off



• Default: On

4

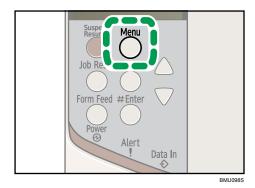
System Menu

The System Menu allows you to set the printer's basic functions. Although you can operate the printer using the default settings, you can also change its settings to better suit your printing needs. Changes made to settings remain effective after power off.

Changing the System Menu

Follow the procedure below to change the settings for Energy Saver Timer.

1. Press the [Menu] key.



The [Menu] screen appears.

2. Press [$^{\blacktriangle}$] or [$^{\blacktriangledown}$] key to display [System], and then press the [$^{\sharp}$ Enter] key.

Menu: System

3. Press [▲] or [▼] key to display [Energy Saver], and then press the [# Enter] key.

System: Energy Saver

4. Press the [▲] or [▼] key to display [E. Saver Timer], and then press the [♯ Enter] key.

Energy Saver: E. Saver Timer E. Saver Timer:

*1 minute

6. Press the [# Enter] key.

Wait two seconds. The [Energy Saver] screen appears.

7. Press the [Menu] key.

The initial screen appears.

System Menu parameters

This section explains about parameters that can be set on the System menu.

Prt. Err Report

You can select [On] or [Off] to have an error report printed when a printer error or memory error occurs.

- Off
- On



• Default: Off

Auto Continue

You can make the Auto Continue setting. When set to on, printing continues after a system error occurs.

- Off
- Immediate
- 1 minute
- 5 minutes
- 10 minutes
- 15 minutes



- Default: Off
- If you set [Auto Continue] to On, a job might be cancelled if an error occurs while it is printing out. When a job is cancelled due to error, the printer automatically begins the next job in the queue.

4

Memory Overflow

You can specify whether or not to print a memory overflow error report.

- Do not print
- Error Info.



• Default: Do not print

Copies

You can specify the number of pages to print.

This setting is disabled if the number of pages to print is specified by command or the printer driver.

• 1-999

Printer Lang.

You can specify the printer language.

- Auto Detect
- PCL
- PS
- PDF



Default: Auto Detect

Sub Paper Size

You can select [Off] or [Auto] to enable the Sub Paper Size function. When you select [Auto], the printer uses an alternative paper size if the currently specified paper is not loaded. When you select [Off], the printer uses any size paper in the current specified paper tray.

- Auto
- Off



• Default: Auto

Page Size

You can specify the default paper size.

220-240V

A4 (210 × 297), A5 (148 × 210), A6 (105 × 148), B5 JIS (182 × 257), C5 Env (162 × 229), C6 Env (114 × 162), DL Env (110 × 220), $8^1/_2 \times 14$, $8^1/_2 \times 13$, $8^1/_2 \times 11$, $8^1/_4 \times 13$, 8×13 , $7^1/_4 \times 10^1/_2$, $5^1/_2 \times 8^1/_2$, $4^1/_8 \times 9^1/_2$, $3^7/_8 \times 7^1/_2$, 16K (195 × 267), Custom Size

120V

 $8^{1}/_{2} \times 14$, $8^{1}/_{2} \times 13$, $8^{1}/_{2} \times 11$, $8^{1}/_{4} \times 13$, 8×13 , $7^{1}/_{4} \times 10^{1}/_{2}$, $5^{1}/_{2} \times 8^{1}/_{2}$, $4^{1}/_{8} \times 9^{1}/_{2}$, $3^{7}/_{8} \times 7^{1}/_{2}$, A4 (210 × 297), A5 (148 × 210), A6 (105 × 148), C5 Env (162 × 229), C6 Env (114 × 162), DL Env (110 × 220), 16K (195 × 267), Custom Size

- **U** Note
 - **220-240V** Default: A4 (210 × 297)
 - **120V** Default: 8¹/₂ × 11
 - The initial paper size is applied when the paper size is not specified in the print data.

Edge-Edge Print

You can print on the complete area of a sheet leaving no border on any edge.

- Off
- On



- Default: Off
- [Edge to Edge] setting under [IPDS Menu] is applied when IPDS is used.

Def.Print Lang.

You can specify the initial printer language if the printer cannot detect the printer language.

- PCL
- PS
- PDF



Default: PCL

Duplex

You can specify whether or not to print on both sides of a sheet.

- None
- Short Edge Bind
- · Long Edge Bind



- Default: None
- This menu appears only when the optional duplex unit is installed.

Blank Pages

You can specify whether or not to print blank pages.

- Print
- Do not print



• Default: Print

Rotate 180 Deg.

You can select whether or not to rotate the image by 180 degrees when printing.

- On
- Off



• Default: Off

Energy Saver

You can specify the number of minutes Energy Saver mode is applied.

E. Saver On/Off

You can specify whether or not to switch Energy Saver.

- On
- Off



- Default: On
- When the printer switches to Energy Saver mode, the Power indicator is unlit, but the Online indicator remains lit.

E. Saver Timer

You can select the lead time needed to switch to the Energy Saver mode. The Energy Saver mode reduces electric power consumption.

- 1 minute
- 5 minutes
- 15 minutes
- 30 minutes
- 45 minutes
- 60 minutes



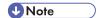
• Default: 5 minutes

Auto Reset Time

Auto Reset

Specify whether to revert to the initial configuration at certain interval. This also specifies the interval to reset the configuration.





• Default: On

Reset Time(sec)

• 10 to 999 sec by 1 sec.



• Default: 60 seconds

Auto Del. Temp

This appears on the menu only when the hard disk is installed.

Specify whether to automatically delete temporarily saved documents (Sample Print, Locked Print and Hold Print data), such as sample print documents or confidential documents. Also specify the time period to elapse before deletion.

Auto Delete

- On
- Off



• Default: Off

Hours to Delete

• 1 to 200 hours by 1 hour.



• Default: 8 hours

Auto Del.Stored

This appears on the menu only when the hard disk is installed.

Specify whether to automatically delete saved documents (Stored Print data).

Also specify the elapse time in days before deletion.

Auto Delete

- On
- Off



• Default: On

Days to Delete

1 to 180 days by 1 day.



• Default: 3 days

Compressed Data

Specify whether to uncompress and extract compressed job data before printing it.

- Print
- Do not print



- Default: Do not print
- The supported compression format is GZIP.
- Any data transmitted using RHPP cannot be printed.

Memory Usage

You can select memory to be used from "Font Priority" or "Frame Priority".

- Font Priority
- Frame Priority



• Default: Frame Priority

Unit of Measure

You can specify the unit of measurement in "mm" or "inch" for the custom paper size.

- mm
- inch



• Default value is destination dependant.

Edge Smoothing

- On
- Off



• Default: On

Toner Saving

- Off
- On



• Default: Off

You can select whether all of the print data is spooled to the hard disk drive before printing.

- On
- Off



- · Default: Off
- Spooling stores a sent print job temporarily in the printer, and then prints it.
- This menu appears only when the optional hard disk is installed.

Letterhead Mode

You can select the letterhead printing mode.

- Off
- Auto Detect
- On (Always)



Default: Auto Detect

Bypass Priority

When the different paper size or type is specified from the driver, you can specify which setting is given priority to, machine setting or command.

- Machine
- Driver/Command



- Default: Driver/Command
- Appear only at network standard model.

Tray Switching

Specify the printer to change printing to the suitable tray, when printer driver specifies different paper size or type from the current tray.

- Off
- On



• Default: Off

Auto Tray SW

Select whether or not to automatically switch to a suitable tray when the current tray runs out of paper.

Off

On



• Default: Off

RAM Disk

If the optional hard disk is not installed for PDF Direct Print, select a value of 2 MB or higher.

This menu appears only when the optional hard disk is not installed.

- 0 MB
- 2 MB
- 4 MB
- 8 MB
- 16 MB



- Default: 4 MB
- When the amount of SDRAM is small and RAM Disk is set to 16 MB, printing may not be possible
 depending on the print job and duplex printing may be canceled. If this happens, increase the
 amount of SDRAM, or set RAM Disk to 8 MB or less.
- For details about the optional SDRAM module, see "Installing the Memory Expansion Units", Hardware Guide.

Auto Email Ntfy

You can specify whether or not to send an error message to a preset e-mail address when an error occurs in the printer.

- On
- Off



- Default: On
- After changing the setting, turn off the power of the printer briefly, and then turn it on again.

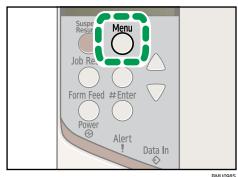
Host Interface Menu

You can set configurations about network connections and communication when using parallel connection between the printer and the computer. The changed configuration holds even if the printer is turned off.

Changing the Host Interface Menu

Follow the procedure below to change the [I/O Timeout].

1. Press the [Menu] key.



Dimo

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Host Interface], and then press the [# Enter] key.

Menu: Host Interface

3. Press the [▼] or [▲] key to display [I/O Timeout], and then press the [# Enter] key.

Host Interface: I/O Timeout

4. Press the [♥] or [♠] key to select the lead time needed to end a printing operation, and then press the [# Enter] key.

I/O Timeout: *15 seconds

4

Wait two seconds. The [I/O Timeout] menu appears.

5. Press the [Menu] key.

The initial screen appears.

Host Interface Menu Parameters

This section explains parameters that can be set on the Host Interface menu.

I/O Buffer

You can select the size of I/O Buffer. Normally it is not necessary to change this setting.

- 128 KB
- 256 KB



Default: 128 KB

I/O Timeout

You can set how many seconds the printer should wait before ending a print job. If printing operation is frequently interrupted by data from other ports, you can increase the timeout period.

- 10 seconds
- 15 seconds
- 20 seconds
- 25 seconds
- 60 seconds



• Default: 15 seconds

Network Setup

You can make network-related settings.



• For details about, see "Configuration", Hardware Guide.

IPv4 Settings

You can select whether to set the IPv4 address automatically or manually.

DHCP

On/Off (Default: On)

• IPv4 Address

You can specify the IPv4 address.

When DHCP is set to on, the IPv4 address cannot be changed. To change it, set DHCP to off. Contact your administrator for information about the network configuration.



• Default: 0.0.0.0

Subnet Mask

You can specify the subnet mask.

When DHCP is set to on, the subnet mask cannot be changed. To change it, set DHCP to off. Contact your administrator for information about the network configuration.



• Default: 0.0.0.0

• Gateway Address

You can specify the gateway address.

When DHCP is set to on, the gateway address cannot be changed. To change it, set DHCP to off. Contact your administrator for information about the network configuration.



• Default: 0.0.0.0

IPv6 Settings

• Stateless Sett.

You can enable or disable IPv6.

- Active
- Not Active



Default: Active

IPsec

This is a security function. For details, contact your administrator.

- Active
- Not Active



• Default: Not Active

Frame Type (NW)

You can select the frame type for NetWare.

- Auto Select
- Ethernet II

- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP



• Default: Auto Select

Active Protocol

You can select the effective protocol.

IPv4

Active, Not Active



- Default: Active
- IPv6

Active, Not Active



- Default: Not Active
- NetWare

Active, Not Active



- Default: Active
- SMB

Active, Not Active



- Default: Active
- AppleTalk

Active, Not Active



• Default: Not Active

Ethernet Speed

You can select the network speed to operate the printer.

- Auto Select
- 10Mbps Half D.
- 10Mbps Full D.

- 100Mbps Half D.
- 100Mbps Full D.



• Default: Auto Select

IEEE802.1X Auth

Select whether to enable or disable IEEE802.11X Authentication on Ethernet.

- Active
- Not Active



• Default: Not Active

Res. Auth. Def.

Initialize IEEE802.1X Authentication data.

LAN Type

You can select Ethernet or Wireless LAN for LAN Type.

This menu appears only when the optional Wireless LAN interface unit is installed.

- Ethernet
- Wireless LAN



• Default: Ethernet

Parallel I/F

Configure settings for the parallel interface. This menu appears only when the optional parallel interface board is installed.

Parallel Timing

Specify the data transmission mode.

- ACK inside
- ACK outside
- STB down



• Default: ACK outside

Commun. Speed

Specify the data transmission rate.

- High Speed
- Standard



• Default: High Speed

Select Status

Specify the signal status.

- High
- Low



• Default: High

Input Prime

Specify whether to enable or disable Input Prime.

- Active
- Not Active



• Default: Not Active

Bidirect. Comm.

Specify whether to enable or disable bidirectional communication.

- Yes
- No



• Default: Yes

Wireless LAN

You can make settings for Wireless LAN. This menu appears only when the optional Wireless LAN interface unit is installed.

Comm. Mode

You can select the transmission mode for Wireless LAN.

- 802.11 Ad hoc
- Infrastructure



- Default: Infrastructure
- Comm. Mode can also be set using a Web Image Monitor. For details, see Web Image Monitor Help.

Ad-hoc Channel

You can select channels:

220-240V 1-13, 36, 40, 44, 48 120V 1-11, 36, 40, 44, 48 ••• Note

• 220-240V 120V Default: 11

SSID

You can set an SSID in the infrastructure mode and the 802.11 Ad hoc mode.

- View
- Enter ID



- Default: blank (ASSID)
- Select [?] to enter [/] for the SSID. Also, [¥] appears when printing the configuration page, read it as [/].
- Characters used are ASCII 0x20-0x7e (32 bytes).
- An SSID is set automatically to the nearest access point if no SSID has been set.
- If no SSID has been set for the 802.11 ad hoc mode, an SSID is set automatically and the same SSID is used for the 802.11 ad hoc mode and the infrastructure mode.
- If blank is specified in SSID for 802.11b adhoc mode or adhoc mode, "ASSID" appears.
- An SSID can also be set using Web Image Monitor. For details, see Web Image Monitor Help.

Security Method

You can enable or disable encryption. You can also specify the security type when the encryption is enabled.

- None
- WEP
 - Change (HEX): Enter the WEP key using a hexadecimal number sequence. When
 using 64 bit WEP, enter 10 ASCII characters. When using 128 bit WEP, enter 26
 ASCII characters.
 - Change (ASCII): Enter the WEP key using an ASCII character sequence. When using 64 bit WEP, enter 5 ASCII characters. When using 128 bit WEP, enter 13 ASCII characters.
- WPA

Encrypt. Meth.

- CCMP(AES)
- TKIP

Authent. Meth.

- WPA-PSK: From 8 to 63 ASCII characters can be entered.
- WPA: When selecting this method, obtain a certificate using Web Image Monitor.
- WPA2-PSK: Same as WPA-PSK, 8 to 63 ASCII characters can be entered.
- WPA2: A supplemental specification of WPA. Fully compatible with IEEE802.11i.

PSK Entry: 8 to 63 characters can be entered.



- Default: None
- The WEP key can also be set using Web Image Monitor. For details, see Web Image Monitor Help.

Fixed USB Port

- Level 1
- Level 2
- Off



- Default: Off
- The service engineer sets this function. Do not change this setting.

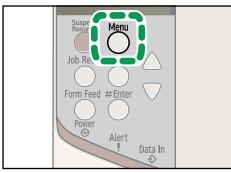
PCL Menu

You can set conditions when using PCL for printing.

Changing the PCL Menu

Follow the procedure below to change the setting for Orientation.

1. Press the [Menu] key.



BMU098S

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [PCL Menu], and then press the [# Enter] key.

Menu: PCL Menu

3. Press the $[\P]$ or [A] key to display [Orientation], and then press the [#] Enter] key.

PCL Menu: Orientation

4. Press the [♥] or [♠] key to display [Portrait], and then press the [# Enter] key.

Orientation: *Portrait

Wait two seconds. The [Orientation] screen appears.

5. Press the [Menu] key.

The initial screen appears.

PCL Menu Parameters

This section explains about parameters that can be set on the PCL menu.

Orientation

You can select the page orientation.

- Portrait
- Landscape



Default: Portrait

Form Lines

You can specify the number of lines per page between 5 and 128.



220-240V Default: 64120V Default: 60

Font Source

You can set the location of the default font.

- Resident
- RAM
- HDD
- SD
- SD Font Dwnload



- Default: Resident
- When you select [RAM], you can select only fonts downloaded to the printer RAM.
- When you select [HDD], you can select only fonts downloaded to the optional hard disk.
- When you select [SD], you can select only fonts for downloaded to the SD card.

Font Number

Specify the ID of the default font you want to use.

- 0 to 63 (Internal)
- 1 to X (Download; "X" is the number of downloaded fonts)

Point Size

You can specify the point size you want to use for the default font between 4 and 999.75 in 0.25 increments.



• Default: 12.00 points

• This setting is effective only for a variable-space font.

Font Pitch

You can specify the number of characters per inch you want to use for the default font between 0.44 and 99.99 in 0.01 increments.



• Default: 10.00 pitch

• This setting is effective only for fixed-space fonts.

Symbol Set

You can specify the character set for the default font. Available sets are as follows:

Roman-8, ISO L1, ISO L2, ISO L5, PC-8, PC-8 D/N, PC-850, PC-852, PC8-TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0



Default: PC-8

Courier Font

You can select a courier-type font.

- Regular
- Dark



• Default: Regular

Ext. A4 Width

You can extend the width of the printable area of A4 sheets reducing side margin width.

- Off
- On



· Default: Off

Append CR to LF

You can specify whether or not to append a CR code to each LF code to print text data clearly.

Off

• On



• Default: Off

Resolution

You can specify the print resolution in dots per inch.

- 300 dpi
- 600 dpi



• Default: 600 dpi

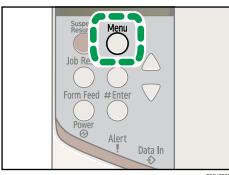
PS Menu

You can set conditions when using PS3 for printing.

Changing the PS Menu

Follow the procedure below to change the setting for date format.

1. Press the [Menu] key.



BMU098S

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [PS Menu], and then press the [# Enter] key.

Menu: PS Menu

3. Press the $[\P]$ or [A] key to display [Data Format], and then press the [#] Enter] key.

PS Menu: Data Format

4. Press the [♥] or [♠] key to display [TBCP], and then press the [# Enter] key.

Data Format: *TBCP

Wait two seconds. The [Data Format] screen appears.

5. Press the [Menu] key.

The initial screen appears.

PS Menu Parameters

This section explains about parameters that can be set on the PS menu.

Job Timeout

You can specify how long the printer waits (in seconds) before cancelling the current job when the job is interrupted while being processed.

- Driver/Command
- Machine Setting



- Default: Driver/Command
- If you select Machine Setting, enter a value between 0 and 999. (Default: 0)

Wait Timeout

You can specify how long the printer waits (in seconds) before it cancels receiving the job when the printer cannot detect the end of the job.

- Driver/Command
- Machine Setting



- Default: Driver/Command
- If you select Machine Setting, enter a value between 0 and 999. (Default: 300)

Data Format

You can select the data format.

- · Binary Data
- TBCP

This setting is effective when using a parallel, USB, or EtherTalk connection.

When you use a parallel or USB connection, the print job is canceled if binary data is sent from the printer driver.

When you use an Ethernet connection, the print job is canceled if:

- The printer driver data format is TBCP and the data format selected using the control panel is Binary Data.
- The printer driver data format is binary and the data format selected using the control panel is TBCP.



• Default: TBCP

Resolution

You can select the resolution.

- 300dpi
- 600dpi Fast
- 600dpi



• Default: 600dpi Fast

/

4

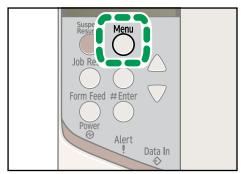
PDF Menu

You can set conditions when using PDF printing.

Changing the PDF Menu

Follow the procedure below to change the resolution setting.

1. Press the [Menu] key.



BMU098S

The [Menu] screen appears.

2. Press the [▲] or [▼] key to display [PDF Menu], and then press the [# Enter] key.

Menu: PDF Menu

3. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Resolution], and then press the $[^{\ddagger}]$ Enter] key.

PDF Menu: Resolution

Press the [▲] or [▼] key to display the resolution you want to use, and then press the [# Enter] key.

Resolution: *600 dpi The initial screen appears.

PDF Menu Parameters

This section explains about parameters that can be set on the PDF menu.

PDF: Change PW

You can specify the password for the PDF file executing PDF Direct Print.



The password can be set using Web Image Monitor, but must be sent through the network. For
increased security, use this menu on the control panel to set the password directly.

PDF Group PW

You can set a group password specified using DeskTopBinder Lite.



- When you use a group password, the optional data protection unit must be installed.
- The password can be set using Web Image Monitor, but must be sent through the network. For increased security, use this menu on the control panel to set the password directly.
- Default: no password set

Resolution

You can select the resolution for the PDF file executing PDF Direct Print.

- 300dpi
- 600dpi Fast
- 600dpi



• Default: 600dpi Fast

4

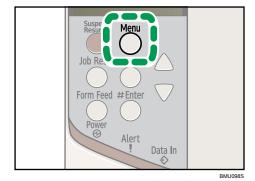
IPDS Menu

You can set conditions when using IPDS for printing. This menu appears only when the optional IPDS unit is installed.

Changing the IPDS Menu

Follow the procedure below to change the resolution setting.

1. Press the [Menu] key.



The [Menu] screen appears.

- 2. Press the [▼] or [▲] key to display [IPDS Menu], and then press the [# Enter] key.
- 3. Press the [♥] or [♠] key to display [Resolution], and then press the [# Enter] key.
- Press the [▼] or [▲] key to select the resolution, and then press the [# Enter] key.
 Wait two seconds. The [Resolution] screen appears.
- 5. Press the [Menu] key.

The initial screen appears.

IPDS Menu Parameters

This section explains about parameters that can be set on the IPDS menu.

Tray Form

Specify an IPDS form for each paper tray.

For each paper tray, select the IPDS form you want to allocate to it.

- Tray 1
- Tray 2
- Tray 3



• Only installed trays appear on the display panel.

Emulation Mode

Specify the emulation mode.

- Native
- 4028



• Default: Native

Print Mode

Specify the print mode.

- Standard
- Enhanced



• Default: Enhanced

Def. Code Page

Specify the default code page.

- 37
- 38
- 260
- 273
- 274
- 276
- 277
- 278
- 280
- 281
- 284
- 285
- 286
- 287
- 288
- 290

- 297
- 420
- 423
- 424
- 500
- 870
- 871875
- 880
- 892
- 893
- 905
- 1025
- 1026
- 1140
- 1141
- 1142
- 1143
- 1144
- 1145
- 1146
- 1147
- 1148
- 1149



• Default: 37

Default FGID

Specify the default FGID (Font Typeface Global Identifier), which identifies the printer's default resident font.

- 3
- 11
- 12
- 18

- 19
- 46
- 85
- 86
- 92
- 111
- 112
- 159
- 164
- 203
- 221
- 223
- 254
- 256
- 281
- 283
- 290
- 304
- 305
- 306
- 318
- 319
- 400
- 404
- 416
- 420
- 424
- 428
- 432
- 23042305
- 2306
- 2307

- 2308
- 2309
- 2310
- 2311
- 5687
- 5707
- 5815
- 5835
- 20224



• Default: 416

Chara. Per Inch

Specify the number of characters per inch (pitch) for the default font. Valid values are 5.0 to 30.0 in units of one tenth of an inch.



• Default: 10.0

Valid Prnt.Area

Enable or disable valid printable area checking.

- On
- Off



• Default: On

Page

Specify how data is positioned on the page.

- Whole
- Comp 1
- Comp 2
- Print



• Default: Whole

Edge to Edge

Enable or disable "Edge to Edge" printing.

• On





• Default: Off

Font Substitut.

Enables or disables font substitution.

- On
- Off



• Default: Off

Caching

Specify whether or not to apply caching for repeated overlays.

- On
- Off



• Default: Off

Font Capture

Enable or disable font capturing.

- On
- Off



- Default: On
- This menu appears only when the optional hard disk is installed.

Resolution

Specify the resolution reported to the host in the "IPDS XOAOPC" command for raster coded fonts and IM1 image support.

- Auto
- 240 dpi
- 300 dpi
- 600 dpi



• Default: 300 dpi

Graph.Char.Str.

Specify the Graphic Character String (Graphic Character Sizing) processing method.

- Auto
- Character Scale
- Font Activation



• Default: Auto

Bar Code

Specify the barcode level protocol.

- Auto
- 4028
- Native



• Default: Auto

Box Draw

Specify the Box Draw processing.

- On
- Off



• Default: Off

Clr. Simulation

Let you specify how color specification controls are processed on a monochromatic printer.

- Fidelity
- Legacy



• Default: Fidelity

Text Color Sim.

Specify how text color specification controls are processed on a monochrome laser printer.

- On
- Off



• Default: On

Tray Mapping

Map the media source (input tray) to an ID the host uses for the media source.

• IPDS Tray

• Auto



- Default: Auto
- Only installed trays appear on the display panel.

4

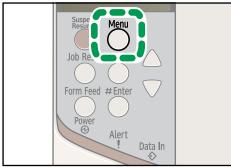
Language Menu

You can set a language to be displayed on the menu.

Changing the Language Menu

Follow the procedure below to change the interface language.

1. Press the [Menu] key.



BMU098S

The menu screen appears.

2. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Language], and then press the [# Enter] key.

Menu: Language

3. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to select the language, and then press the $[^{\#}$ Enter] key.

Language: *English

Wait for one second. The [Language] menu screen appears.

4. Press the [Menu] key.

The initial screen appears.

Language Menu Parameters

You can select the language you use. Available languages are as follows:

English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, Portuguese, Czech, Polish, Hungarian, Russian.



• Default: English

5. Monitoring and Configuring the Printer

This chapter explains how to use Web Image Monitor and other applications to monitor the printer or change its settings.

Using Web Image Monitor

Using Web Image Monitor, you can check the printer status and change settings.

Available operations

The following operations can be remotely performed using Web Image Monitor from a client computer.

- · Displaying printer status or settings
- · Checking the print job status or history
- Interrupting currently printing jobs
- · Resetting the printer
- · Managing the Address Book
- Making printer settings
- · Making network protocol settings
- Making security settings

Configuring the printer

To perform the operations from Web Image Monitor, TCP/IP is required. After the printer is configured to use TCP/IP, operations from Web Image Monitor become available.

Recommended Web browser

• Windows:

Internet Explorer 5.5 SP2 or higher

Firefox 1.0 or higher

Mac OS:

Firefox 1.0 or higher

Safari 1.0, 1.2, 2.0 (412.2) or higher

Web Image Monitor supports screen reader software. We recommend JAWS 7.0 or a later version.



• Safari cannot be used on Mac OS X 10.4.1.

- Display and operation problems can occur if you do not enable JavaScript and cookies, or if you are using a non-recommended Web Browser.
- If you are using a proxy server, change the Web browser settings. Contact your administrator for information about the settings.
- If you click your browser's back button but the previous page does not appear, click the browser's refresh button and try again.
- Printer information is not automatically updated. To perform an update, click [Refresh] in the display area.
- We recommend using Web Image Monitor in the same network.
- You cannot access to the printer from outside the firewall.
- When using the printer under DHCP, the IP address may be automatically changed by the DHCP server settings. Enable DDNS setting on the printer, and then connect using the printer's host name. Alternatively, set a static IP address to the DHCP server.
- If the HTTP port is disabled, connection to the printer using the printer's URL cannot be established. SSL setting must be enabled on this printer. For details, consult your administrator.
- When using the SSL encryption protocol, enter "https://(printer's IP address or host name)/".
- Internet Explorer must be installed on your computer. Use the most recent available version. We recommend Internet Explorer 6.0 or later.
- When you are using Firefox, fonts and colors may be different, or tables may be out of shape.
- When using a host name under Windows Server 2003/2003 R2/2008 or Windows Vista with IPv6
 protocol, perform host name resolution using an external DNS server. The host file cannot be used.
- To use JAWS 7.0 under Web Image Monitor, you must be running Windows OS and Microsoft Internet Explorer 5.5 SP2, or a later version.

Displaying Top Page

This section explains the Top Page and how to display Web Image Monitor.



- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".
- 1. Start your Web browser.
- Enter "http://(printer's IP address or host name)/" in your Web browser's URL bar.
 Top Page of Web Image Monitor appears.

If the printer's host name has been registered on the DNS or WINS server, you can enter it.

When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's IP address or host name)/".

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Tener | Device | Saver Mode | Device | Saver | Device |

Every Web Image Monitor page is divided into the following areas:

1. Menu area

If you select menu, its content will be shown on the work area, or the sub area.

2. Tab area

Details about each menu appear.

3. Header area

The dialog box for switching to the user mode and administrator mode appears, and each mode's menu will be displayed.

The link to help and dialog box for keyword search appears.

4. Help

Use Help to view or download Help file contents.

5. Display area

Displays the contents of the item selected in the menu area.

Printer information in the display area is not automatically updated. Click [Refresh] at the upper right in the display area to update the printer information. Click the Web browser's [Refresh] button to refresh the entire browser screen.



• When using a host name under Windows Server 2003/2003 R2/2008 or Windows Vista with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

When User Authentication is Set

Login (using Web Image Monitor)

Follow the procedure below to log on when user authentication is set.

- 1. Click [Login].
- 2. Enter a login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.



- For user code authentication, enter a user code in [Login User Name], and then click [Login].
- The procedure may differ depending on the Web browser used.

Log off (using Web Image Monitor)

Click [Logout] to log off.



• When you log on and made the setting, always click [Logout].

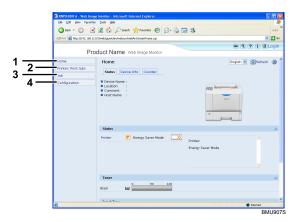
About Menu and Mode

There are two modes available with Web Image Monitor: guest mode and administrator mode.

Displayed Items may differ depending on the printer type.

Guest mode

In the guest mode, printer status, settings, and print job status can be viewed, but the printer settings cannot be changed.



1. Home

The [Status], [Configuration], [Counter], and [Inquiry] tab are displayed. Details of the tab menu are displayed on the work area.

2. Printer: Print Jobs

Allows you to display list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

5

3. Job

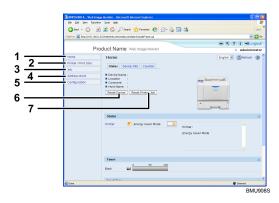
Display all print files.

4. Configuration

Display current printer and network settings.

Administrator mode

In the administrator mode, you can configure various printer settings.



1. Home

The [Status], [Configuration], [Counter], and [Inquiry] tab are displayed. Details of the tab menu are displayed on the work area.

2. Printer: Print Jobs

Allows you to display list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

3. Job

Display all print files.

4. Address Book

User information can be registered, displayed, changed, and deleted.

5. Configuration

Make system settings for the printer, interface settings, and security.

6. Reset Device

Click to reset the printer. If a print job is being processed, the printer will be reset after the print job is completed. This button is located on Top Page.

7. Reset Printer Job

Click to reset current print jobs and print jobs in queue. This button is located on Top Page.

Access in the Administrator Mode

Follow the procedure below to access Web Image Monitor in the administrator mode.

5

1. On Top Page, click [Login].

The window for entering the login user name and password appears.

2. Enter your login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

Displaying Web Image Monitor Help

When using Help for the first time, clicking the icon marked "?" (20) makes the following screen appear, in which you can view Help in two different ways, as shown below:

Viewing Help on our Web site

Downloading Help to your computer.

Downloading and checking Help

You can download Help to your computer. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.



- By clicking "?" (2) in the header area, the contents of Help appear.
- By clicking "?" (), the Help icon in the display area, Help for the setting items in the display area appears.

Downloading Help

- 1. In the [OS] list, select the operating system.
- 2. In the [Language] list, select the language.
- 3. Click [Download].
- 4. Download Help by following the instructions on the screen.
- 5. Store the downloaded compressed file in a given location, and then decompress the file.

To create a link for the Help button (20), save the downloaded Help files on a Web server.

Linking the URL of the downloaded Help

You can link the URL of the help file on a Web server to the "?" button.

- 1. Log on to Web Image Monitor in the administrator mode.
- 2. In the menu area, click [Configuration].
- 3. Click [Webpage].

4. In the [Set Help URL Target] box, enter the URL of the help file.

If you saved the file to a Web server, and the URL of the index file is "http://a.b.c.d/HELP/EN/index.html", enter "http://a.b.c.d/HELP/".

5. Click [OK].



• If you save the Help files on your hard disk, you must access them directly - you cannot link to them using the Help button (??).

Registering Classification Codes

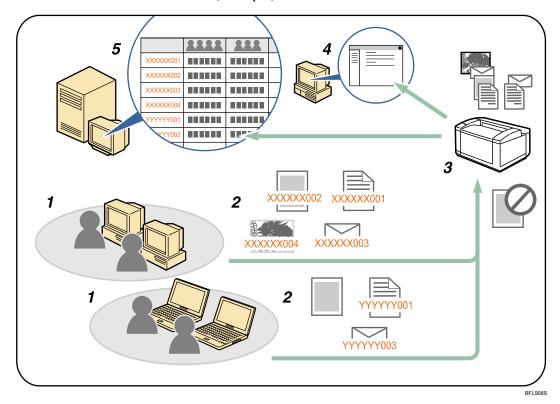
This section explains classification codes.

If you register classification codes, the printer logs the number of prints made under each code.

You can register classification codes to individual users and specified purposes, enabling you to monitor printer usage by each.

For example, you can manage accounts according to individual clients or account titles.

Classification Code - Based Process (example)



- 1. Divisions, sections, departments, project teams, users, etc., to be managed.
- 2. The appropriate classification code for the print job is entered.

For details, see "Specifying Classification Code for Print Job".

3. The job is printed.

When printing in an environment where classification codes are required, print jobs that do not have a classification code cannot be printed.

For details, see "Configuring Classification Codes".

- 4. The print job is checked using Web Image Monitor.
- 5. Classification codes are collected and managed by an external log collection system.

5

Configuring Classification Codes

Use Web Image Monitor to specify whether or not to apply classification code requirement to print jobs.

- If "Required" is selected for the classification code requirement setting in Web Image Monitor, any print job that without a classification code specified will not be printed.
- The configuration page can be printed at any time.
- The default setting for classification code requirement is "Optional".
- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

- Enter the login user name and password, and then click [Login].
 For details about the login user name and password, consult your administrator.
- 4. Click [Configuration] in the left area, and then click [Logs].
- 5. Check that [Required] or [Optional] is selected for [Classification Code] in the [Common Settings for All Logs] column.
- 6. Click [OK].
- 7. Click [Logout].
- 8. Quit Web Image Monitor.

Reference

• p.185 "Using Web Image Monitor"

Using SmartDeviceMonitor for Admin

Using SmartDeviceMonitor for Admin, you can monitor the network printers. Also, you can change the configuration of the network interface board using TCP/IP or IPX/SPX.



• IPv6 cannot be used on this function.

Protocol stack provided with operating system

• Windows 2000

TCP/IP

IPX/SPX

NetWare

Novell Client for Windows 2000/XP/2003

Windows XP

TCP/IP

IPX/SPX

Novell Client for Windows 2000/XP/2003

• Windows Vista

TCP/IP

Novell Client for Windows Vista

Windows Server 2003/2003 R2

TCP/IP

IPX/SPX

Novell Client for Windows 2000/XP/2003

• Windows Server 2008

TCP/IP

IPX/SPX

Available operations

The following functions are available:

- Printer Information function
 - Display the network settings and detailed information of the printer.
 - Display the number of pages printed under each user code.
 - Display the status of print jobs sent from computers.
 - Change the printer network settings.

- Device Settings function
 - Lock some of the setting items on the control panel so that they cannot be changed using the control panel.
 - Select type of paper loaded in the paper trays.
- Energy Saver function
 - Enable or disable the Energy Saver mode.
- System Status function
- Display the information such as when paper is depleted during printing on a computer.
- Groups function
 - Monitor multiple printers at the same time. When there are multiple printers to manage, you
 can create groups and classify the printers to facilitate management.
 - You can customize printer status according to groups, and send status notification e-mail to a computer.

Installing SmartDeviceMonitor for Admin

Follow the procedure below to install SmartDeviceMonitor for Admin.

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

3. Select an interface language, and then click [OK].

The default interface language is English.

4. Click [SmartDeviceMonitor for Admin], and then click [Next>].

The software license agreement appears in the [License Agreement] dialog box.

- 5. After reading through its contents, click [Next>].
- 6. Follow the instructions on the screen.

A message appears when the installation is completed.

7. Click [OK].

A message about restarting the computer may appear. Restart the computer to complete installation.



- Auto Run may not work under certain operating system settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.
- If you are required to restart the computer after installing SmartDeviceMonitor for Admin, restart the computer and continue the configuration.

Changing the Network Interface Board Configuration

Follow the procedure below to change the network interface board configuration using SmartDeviceMonitor for Admin.

- 1. Start SmartDeviceMonitor for Admin.
- On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

- 3. In the list, select a printer whose configuration you want to change.
- 4. On the [Tools] menu, click [NIB Setup Tool].



A Web browser opens and the window for entering the user name and password for the Web Image Monitor administrator appears.

NIB Setup Tool starts. Follow the instruction on the screen.

5. Enter the login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

- 6. Configure settings using Web Image Monitor.
- 7. Click [Logout].
- 8. Quit Web Image Monitor.
- 9. Quit SmartDeviceMonitor for Admin.



• For details about Web Image Monitor, see "Using Web Image Monitor".

Reference

• p.185 "Using Web Image Monitor"

Locking the Menus on the Printer's Control Panel

Follow the procedure below to lock the menus on the printer's control panel.

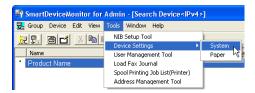
- 1. Start SmartDeviceMonitor for Admin.
- On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

- 3. In the list, select a printer whose configuration you want to change.
- 4. On the [Tools] menu, point to [Device Settings], and then click [System].



A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

5. Enter the login user name and password, and then click [Login].

For details about the user name and password, consult your administrator.

The [System] page of Web Image Monitor appears.

- 6. On the [Protect Printer Display Panel], select [Level 1] or [Level 2].
- 7. Click [OK].
- 8. Click [Logout].
- 9. Quit Web Image Monitor.
- 10. Quit SmartDeviceMonitor for Admin.



• For details about Web Image Monitor, see "Using Web Image Monitor".

Reference

p.185 "Using Web Image Monitor"

Changing the Paper Type

Follow the procedure below to change the paper type.

1. Start SmartDeviceMonitor for Admin.

On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

- 3. In the list, select a printer whose configuration you want to change.
- 4. On the [Tools] menu, point to [Device Settings], and then click [Paper].

A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

5. Enter the login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

The [Paper] page appears.

Select a paper type in the [Paper Type] list for each tray.

- 6. Enter required setting items, and then click [OK].
- 7. Click [Logout].
- 8. Quit Web Image Monitor.
- 9. Quit SmartDeviceMonitor for Admin.



- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about setting items, see Help in the [General Settings] on [Configuration] page.

Reference

• p.185 "Using Web Image Monitor"

Managing User Information

Follow the procedure below to manage the user's information using SmartDeviceMonitor for Admin.

Prints jobs can be managed and functions restricted by user codes.

Starting User Management Tool

Follow the procedure below to start User Management Tool.

1. Start SmartDeviceMonitor for Admin.

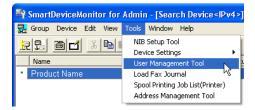
On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

- 3. In the list, select a printer you want to manage.
- 4. On the [Tools] menu, click [User Management Tool].



The dialog box for entering the user name and password appears.

5. Enter the user name and password, and then click [OK.]

Enter the same user name and password you enter to log on to the Web Image Monitor. For details about the user name and password, consult your administrator.

User Management Tool starts.

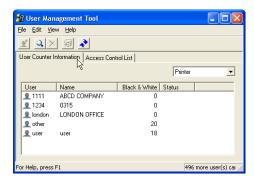


• For details about User Management Tool, see SmartDeviceMonitor for Admin Help.

Displaying the number of sheets printed

Follow the procedure below to display the number of sheets printed under each user.

- Start SmartDeviceMonitor for Admin User Management Tool.
- 2. Click the [User Counter Information] tab of User Management Tool.



The number of pages printed under each user appears.

3. Click [Exit] on the [File] menu to quit User Management Tool.

Exporting the information about the number of pages printed

Follow the procedure below to export the information of the number of pages printed under each user code as a ".csv" file.

- 1. Start SmartDeviceMonitor for Admin User Management Tool.
- 2. Click the [User Counter Information] tab of User Management Tool.
- 3. On the [File] menu, click [Export User Statistics List].



- 4. Specify the save location and file name, and then click [Save].
- 5. Click [Exit] on the [File] menu to quit User Management Tool.

Resetting the number of pages printed to 0

Follow the procedure below to reset the number of pages printed under each user to 0.

- 1. Start SmartDeviceMonitor for Admin User Management Tool.
- 2. Click the [User Counter Information] tab of User Management Tool.
- 3. Select the user whose information you want to reset.

4. On the [Edit] menu, click [Reset User Counters].



5. Select the check box, and then click [OK].

A confirmation message appears.

6. Click [OK].

The count for the selected paper type becomes 0 and [Modified] is displayed for [Status].

7. On the [Edit] menu, click [Apply Settings].



Changes are applied to information on the [User Counter Information] tab.

8. Click [Exit] on the [File] menu to quit User Management Tool.

Restricting functions

Follow the procedure below to restrict use of individual functions.

- 1. Start SmartDeviceMonitor for Admin User Management Tool.
- 2. Click the [User Counter Information] tab of User Management Tool.
- 3. Click the user whose functions you want to restrict.
- 4. On the [Edit] menu of User Management Tool, click [Restrict Access To Device].



- 5. Select the check box of the functions you want to restrict.
- 6. Click [OK].

A confirmation message appears.

7. Click [Yes].

The settings are applied.

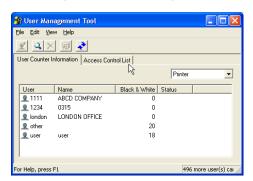
8. Click [Exit] on the [File] menu to quit User Management Tool.

Setting applicable functions to new users

Follow the procedure below to add new users and set functions applicable to them.

1. Start SmartDeviceMonitor for Admin User Management Tool.

2. Click the [Access Control List] tab of User Management Tool.



3. On the [Edit] menu, click [Add New User].



- 4. Enter the user code and user name.
- 5. Select the check box of the functions applicable to the new user.
 If the check boxes are unavailable, there is no restriction to use that function.
- 6. Click [OK].

The user is added, and [New] is displayed for [Status].

7. On the [Edit] menu, click [Apply Settings].

The settings are applied.

8. Click [Exit] on the [File] menu to quit User Management Tool.



• For details about setting restrictions, see SmartDeviceMonitor for Admin Help.

Configuring the Energy Saver Mode

Follow the procedure below to configure Energy Saver mode.

- 1. Start SmartDeviceMonitor for Admin.
- On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

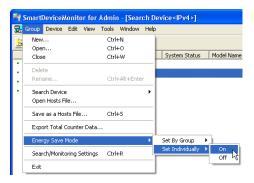
Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

3. Select the printer whose settings you want to make.

To make settings for all printers in the selected group, select no printer.

 Click the [Group] menu, point to [Energy Save Mode], [Set Individually], and then click [On].



To select all the printers in the group, select [Set By Group].

To disable Energy Save mode, click [Off].

5. Quit SmartDeviceMonitor for Admin.



For details about the setting for Energy Saver mode, see SmartDeviceMonitor for Admin Help.

Setting a Password

Follow the procedure below to set a password.

- 1. Start SmartDeviceMonitor for Admin.
- On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

- 3. In the list, select a printer whose configuration you want to change.
- 4. On the [Tools] menu, click [NIB Setup Tool].



A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

NIB Setup Tool starts when the network interface board is default. Follow the instructions on the screen.

5. Enter the login user name and password, and then click [Login].

For details about the user name and password, consult your administrator.

Top Page of Web Image Monitor appears.

- 6. Click [Configuration].
- Click [Program/Change Administrator] on the [Device Settings] area, and then change the settings.
- 8. Click [OK].
- 9. Click [Logout].
- 10. Quit Web Image Monitor.
- 11. Quit SmartDeviceMonitor for Admin.

Checking the Printer Status

Follow the procedure below to check printer status.

- 1. Start SmartDeviceMonitor for Admin.
- On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using TCP/IP SNMP v3, enter the user authentication.

To obtain status details, click the printer in the list, and then click [Open] on the [Device] menu.

The printer status appears in the dialog box.

4. Click [System] or [Printer].

The printer status appears in the dialog box.

5. Quit SmartDeviceMonitor for Admin.



For details about status icons and items in the dialog box, see SmartDeviceMonitor for Admin Help.

Changing Names and Comments

Follow the procedure below to change the names and comments of the printer.

- 1. Start SmartDeviceMonitor for Admin.
- 2. On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

3. Select a printer in the list, and then click [NIB Setup Tool] on the [Tools] menu.

A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

NIB Setup Tool starts when the network interface board is default. Follow the instructions on the screen.

4. Enter the login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

Top Page of Web Image Monitor appears.

- 5. Click [Configuration].
- 6. Click [System] on the [Device Settings] area, and then change the settings.
- 7. Click [OK].
- 8. Click [Logout].
- 9. Quit Web Image Monitor.
- 10. Quit SmartDeviceMonitor for Admin.



- In the [Device Name] box, enter a device name on the printer using up to 31 characters.
- In the [Comment] box, enter a comment on the printer using up to 31 characters.

• For details about Web Image Monitor, see "Using Web Image Monitor".

Reference

• p.185 "Using Web Image Monitor"

Viewing and Deleting Spool Print Jobs

- 1. Start SmartDeviceMonitor for Admin.
- On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

3. Select a printer in the list, and then click [Spool Printing Job List(Printer)] on the [Tools] menu.

A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

4. Enter the login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

[Spool Printing Job List] appears in the Web Image Monitor.

- 5. Click [Logout].
- 6. Quit Web Image Monitor.
- 7. Quit SmartDeviceMonitor for Admin.



- To display Spool Printing Job List, [Spool Printing] must be set to [Active] on Web Image Monitor in advance.
- To delete the Spool Printing Job, select the document you want to delete and then click [Delete].
- For details, see Help in the [Spool Printing Job List] area.
- For details about Web Image Monitor, see "Using Web Image Monitor".

Reference

p.185 "Using Web Image Monitor"

Using SmartDeviceMonitor for Client

To view the status of printers using SmartDeviceMonitor for Client, configure SmartDeviceMonitor for Client beforehand.

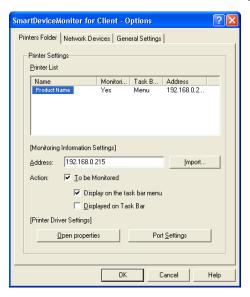
Monitoring Printers

Follow the procedure below to monitor the printer using SmartDeviceMonitor for Client.

 Right-click the SmartDeviceMonitor for Client icon, point to [Properties], and then click [Monitor Device Settings...].



2. On the [Printers Folder] tab, select the printer you want to monitor, and then select the [To Be Monitored] check box in the Monitoring Information Settings area.



To display the name of the monitored printer on the task bar, you must first select the [To be Monitored] check box, and then select the [Displayed on the Task Bar menu] check box.

3. Click [OK].

The dialog box closes and the configured printer is monitored.



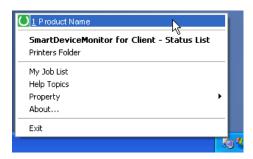
For details about status icons, see SmartDeviceMonitor for Client Help.

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Checking the Printer Status

Follow the procedure below to check printer status using SmartDeviceMonitor for Client.

 Right-click the SmartDeviceMonitor for Client icon, and then click the printer name on the task bar.



The printer status appears in the dialog box.



• For details about items in the dialog box, see SmartDeviceMonitor for Client Help.

When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

- The network printer can only receive one print job from SmartDeviceMonitor for Client at a time. While
 the network printer is printing, another user cannot access it until the job is finished. In this case,
 SmartDeviceMonitor for Client tries to access the network printer until the retry interval expires.
- If SmartDeviceMonitor for Client cannot access the network printer and times out, it will stop sending
 the print job. In this case, you should cancel the paused status from the print queue window.
 SmartDeviceMonitor for Client will resume access to the network printer. You can delete the print job
 from the print queue window, but canceling a print job printed by the network printer might cause the
 next job sent from another user to be incorrectly printed.
- If a print job sent from SmartDeviceMonitor for Client is interrupted and the network printer cancels the job because something went wrong, send the print job again.
- Print jobs sent from another computer do not appear in the print queue window, regardless of protocol.
- If various users send print jobs using SmartDeviceMonitor for Client to network printers, the printing order might not be the same as that in which the jobs were sent.
- An IP address cannot be used for the IPP port name because the IP address is used for the SmartDeviceMonitor for Client port name.
- When setting SSL, a protocol for encrypted communication, under environment which server
 authentication is issued, enter "https://(printer's IP address or host name)/". Internet Explorer must

5

be installed on your computer. Use the highest version. Internet Explorer 6.0 or higher is recommended.

If the [Security Alert] dialog box appears when accessing the printer using IPP to create or configure
an IPP port, or when printing, install the certificate. To select the certificate store location when using
Certificate Import Wizard, click [Place all certificates in the following store], and then click [Local
Computer] under [Trusted Root Certification Authorities].



• For details about SSL settings, consult your administrator.

5

Printer Status Notification by E-Mail

Whenever a paper tray becomes empty or paper jams, a notification e-mail is sent to the registered addresses.

You can make the timing and content settings for notification e-mail.



- Depending on your e-mail application, a phishing warning might appear after you receive an e-mail
 message. To prevent phishing warnings appearing after you receive e-mail from a specified sender,
 you must add the sender to your e-mail application's exclusion list. For details about how to do this,
 see your e-mail application's Help.
- Service call.
- Toner is empty.
- Toner is nearly empty.
- Maintenance kit needs replacing.
- Maintenance kit needs replacing soon.
- Paper has jammed.
- Cover is open.
- Paper tray is empty.
- Paper tray is nearly empty.
- Paper tray error.
- Output paper tray is full.
- Unit connection error.
- Duplex unit error.
- Waste toner bottle is full.
- Waste toner bottle is nearly full.
- Memory for file storage is full soon.
- Log error.
- Device access violates.
- 1. Open a Web browser, and then enter "http://(printer's address)/" in the address bar.

Top Page of Web Image Monitor appears.

When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's address)/".

2. Click [Login] on Top Page of Web Image Monitor.

The window for entering the login user name and password appears.

3. Enter the user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

- 4. In the menu area, click [Configuration].
- 5. On the [Device Settings] area, click [E-mail].
- 6. Make the following settings:
 - Items in the Reception column: Make the necessary settings for sending and receiving e-mail.
 - Items in the SMTP column: Configure the SMTP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the SMTP server.
 - Items in the POP before SMTP column: Configure the POP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the POP server.
 - Items in the POP3/IMAP4 column: Configure the POP3 or IMAP4 server. Check your mailing environment, and then specify the necessary items.
 - Items in the E-mail Communication Port column: Configure the port to be used for access to the mail server.
 - Items in the E-Mail Notification Account column: Specify these items if you want to use on-demand e-mail notification.
- 7. Click [OK].

Auto E-mail Notification

 Click [Configuration] in the menu area, and then click [Auto E-mail Notification] on the [Device Settings] area.

The dialog box for making notification settings appears.

- 2. Make the following settings:
 - Items in Notification Message column: You can set this according to your needs, for example, the printer's location, service representative contact information.
 - Items in the Groups to Notify column: E-mail notification addresses can be grouped as required.
 - Items in the Select Groups/Items to Notify column: Select groups for each notification type, such
 as printer status and error.

To make detailed settings for these items, click [Edit] next to [Detailed Settings of Each Item].

- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

On-demand E-mail Notification

 Click [Configuration] in the menu area, and then click [On-demand E-mail Notification] on the [Device Settings] area.

The dialog box for making notification settings appears.

- 2. Make the following settings:
 - Notification Subject: Enter a text string to be added to the subject line of return e-mails.
 - Items in Notification Message column: You can set this according to your needs, for example, the printer's location, service representative contact information.
 - Items in the Access Restriction to Information column: Select whether to restrict accesses based on a specific category of information.
 - Items in the Receivable E-mail Address/Domain Name Settings column: Enter an e-mail address
 or domain name to use for requesting information by e-mail and to receive its return e-mail.
- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

Mail authentication

You can configure mail authentication to prevent illegal use of the mail server.

SMTP authentication

Specify SMTP authentication.

When mail is sent to the SMTP server, authentication is performed using SMTP AUTH protocol by prompting the mail originator to enter the user name and password. This prevents illegal use of the SMTP server.

- 1. In the menu area, click [E-mail]
- 2. Make the following settings:
 - SMTP Authentication: Enable or disable SMTP authentication.
 - SMTP Auth. E-mail Address: Enter the e-mail address.
 - SMTP Auth. User Name: Enter the SMTP account name.
 - SMTP Auth. Password: To set or change the password for SMTP AUTH.
 - SMTP Auth. Encryption: Select whether to encrypt the password or not.

[Auto Select]: If the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.

[Active]: If the authentication method is CRAM-MD5 or DIGEST-MD5.

[Inactive]: If the authentication method is PLAIN or LOGIN.

- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

POP before SMTP authentication

Select whether to log on to the POP3 server before sending e-mail.

- 1. In the menu area, click [E-mail].
- Make the following settings:
 - POP before SMTP: Enable or disable POP before SMTP.
 - POP E-mail Address: Enter the e-mail address.
 - POP User Name: Enter the POP account name.
 - POP Password: To set or change the POP password.
 - Timeout setting after POP Auth.: Enter the time available before connecting to the SMTP server after logging on to the POP server.
- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

Sending On-demand E-mail

To use on-demand e-mail notification, perform the following configuration tasks in Web Image Monitor.

- 1. In the menu area, click [E-mail].
- 2. Make the following settings:
 - E-mail Notification E-mail Address: Enter the address using alphanumeric characters.
 - Receive E-mail Notification: Specify whether to use on-demand e-mail notification.
 - E-mail Notification User Name: Enter the administrator's user name as the mail originator name.
 - E-mail Notification Password: Enter the password of the mail notification user.
- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

Format of on-demand e-mail messages

To use mail notification, you need to send an on-demand e-mail message to this printer.

Using your mail software, enter the following:

ltem	Description
Subject (Referred to as Subject)	Enter a request regarding the device. For details, see the table below.
From (Referred to as From)	Specify a valid mail address. The device information will be sent to the address specified here.

Subject field

Format: device status?parametername=parameter[&=parameter][&=parameter]...

Subject field coding examples

Coding example	Action
devicestatus?request=sysconfig& format=text& lang=en	The device's system configuration information will be sent in an English text format.
devicestatus?request=sysconfig	The device's system configuration information will be sent in a preset format and language.

Parameters

Parameter	Meaning	Default
request	Information to be obtained	Mandatory
format	Mail format	Mail will be sent in the format preset for each mail address.
lang	Language for mail body	Mail will be sent in the language preset for each mail address.

Parameters specifying the information to be obtained

Information to be obtained	Parameter
System configuration information	sysconfig
Network configuration information	netconfig
Printer configuration information	prtconfig
Supplies information	supply

Information to be obtained	Parameter
Device status information	status

Parameters specifying the mail format

Mail format	Parameter
Text	text
HTML	html
XML	xml

Parameters specifying the language for mail body

Language for mail body	Parameter
English	en
French	fr
German	de
Italian	it
Spanish	es
Dutch	nl
Danish	da
Finnish	fi
Norwegian	no
Portuguese	pt
Swedish	sv
Czech	CS
Polish	pl
Hungarian	hu



• A mail message must be within 1 MB in size.

5

- E-mail may be incomplete if sent immediately after power on.
- The Subject field is case-insensitive.
- Parameter names can be written in any order.
- HTML and XML can be selected for subject field, but output is text only.

Remote Maintenance by telnet

- Remote Maintenance should be password-protected so that access is allowed to administrators only.
- The password is the same as the one of Web Image Monitor administrator. When the password is changed using "mshell", other passwords change also.
- Some commands cannot be used depending on your printer.

Using telnet

Follow the procedure below to use telnet.

- Only one user at a time can log on to perform remote maintenance.
- If you are using Windows Vista, you must enable the telnet server and telnet client beforehand.
- 1. Use the IP address or the host name of the printer to start telnet.

% telnet "IP_address"

2. Enter your user name and password.

Contact your administrator for information about the settings.

- 3. Enter a command.
- 4. Quit telnet.

msh> logout

The configuration message about saving the changes appears.

5. Enter "yes" to save the changes, and then press the [# Enter] key.

If you do not want to save the changes, enter "no", and then press the [# Enter] key. To make further changes, enter "return" at the command line, and then press the [# Enter] key.

U Note

- If the message "Can not write NVRAM information" appears, the changes are not saved. Repeat the
 procedure above.
- · When the changes are saved, the network interface board is reset automatically with that changes.
- When the network interface board resets, the print job in print process will be printed. However, print
 jobs in queue will be canceled.
- To use Telnet under Windows Vista, SmartDeviceMonitor for Client must be installed.

5

8021x

Use "8021x" commands to display IEEE 802.1x related information.

View settings

msh> 8021x

Configuration

msh> 8021x "parameter"

Parameter	Value configured
eap {tls ttls leap peap} {chap mschap	You can specify the EAP authentication type.
mschapv2 pap md5 tls }	tls: EAP-TLS (default)
	ttls: EAP-TTLS
	leap: LEAP
	peap: PEAP
	chap, mschap, mschapv2, pap, md5, or tls are settings for the phase 2 method, and must be set when using EAP-TTLS or PEAP.
	Do not make these settings when using other EAP authentication types.
	If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5.
	If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server.
	Usable characters: ASCII 0x20-0x7e (31 bytes).
	The default is blank.
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication.
	Usable characters: ASCII 0x20-0x7e (31 bytes).
	The default is blank.
domain "character string"	You can specify the login domain name for the Radius server.

Parameter	Value configured
	The characters you can enter are ASCII 0x20-0x7e (31 bytes), but not "@" or "\".
	The default is blank.
password "character string"	You can specify the login for the Radius server.
	Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
srvcert {on off}	You can set the server certificate. The default is "off".
imca {on off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and subdomain of the certificate server.
	Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
claer {a each command all}	Returns the selected setting to its default value.
	If you specify "all", all settings will be restored to their default values. However, IEEE 802.1x Auth. status (enable or disable) for Ethernet and wireless LAN will not be initialized.

access

Use the "access" command to view and configure access control. You can also specify two or more access ranges.

View settings

msh> access

IPv4 configuration

msh> access [x] range "start-address end-address"

• [x] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv4 addresses between 192.168.0.10 and 192.168.0.20:

msh> access 1 range6 192.168.0.10 192.168.0.20

IPv6 configuration

msh> access [x] range6 "start-address end-address"

• [x] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv6 addresses between 2001:DB8::100 and 2001:DB8::200.

msh> access 1 range6 2001:DB8::100 2001:DB8::200

IPv6 access mask configuration

msh> access [×] mask6 "base-address prefixlen"

• [x] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv6 addresses to 2001:DB8::/32

msh> access 1 mask6 2001:DB8:: 32

Access control initialization

msh> access flush

• Use the "flush" command to restore the default settings so that all access ranges become "0.0.0.0" for IPv4, and ":: " for IPv6.



- The access range restricts computers from use of the printer by IP address. If you do not need to
 restrict printing, make the setting "0.0.0.0" for IPv4, and "::" for IPv6.
- Valid ranges must be from lower (start address) to higher (end address).
- If you are running IPv4 or IPv6, up to five access ranges can be registered and selected.
- IPv6 can register and select the range and the mask for each access ranges.
- IPv6 mask ranges between 1 128 can be selected.
- Up to five access ranges can be specified. The entry is invalid if the target number is omitted.
- You cannot send print jobs, or access Web Image Monitor and diprint from a restricted IP address.

appletalk

Use the "appletalk" command to view and configure Apple Talk parameters.

View settings

msh> appletalk

- [2] means "active" and [0] means "inactive".
- The default is [2].

Changing PAP timeout configuration

msh> appletalk ptimeout value > 0

• Timeout value becomes effective.

msh> appletalk ptimeout value = 0

• Timeout value becomes ineffective.

authfree

Use the "authfree" command to view and configure AuthFree parameters.

View settings

The following command displays the current AuthFree settings:

msh> authfree

• If print job authentication exclusion is not set, authentication exclusion control cannot be displayed.

IPv4 address settings

```
msh> authfree "ID" range_addr1 range_addr2
```

IPv6 address settings

```
msh> authfree "ID" range6_addr1 range6_addr2
```

IPv6 address mask configuration

```
msh> authfree "ID" mask6_addr1 masklen
```

Parallel/USB settings

```
msh> authfree [parallel | usb] [on|off]
```

• To enable authfree, set to on. To disable authfree, set to off. Always specify the interface.

Authentication exclusion control initialization

msh> authfree flush

autonet

Use the "autonet" command to view and configure AutoNet parameters.

View settings

The following command displays the current AutoNet settings:

msh> autonet

Configuration

You can configure AutoNet settings.

msh> autonet {on|off}

• {on} means "active" and {off} means "inactive".

Current interface priority configuration display

msh> autonet priority

Interface priority configuration

msh> autonet priority "interface_name"

- You can give interface's AutoNet parameter priority.
- Priority settings are available when multiple interfaces are installed.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface



- If an interface is not selected, the current interface connection settings remain in effect.
- For details about AutoNet, refer to autonet parameters.

bonjour

Use the "bonjour" command to display bonjour-related settings.

View settings

Bonjour settings are displayed.

msh> bonjour

Bonjour service name setting

You can specify the bonjour service name.

msh> bonjour cname "computer name"

• The computer name can be entered using up to 63 alphanumeric characters.

Bonjour Installation location information setting

You can enter information about the location where the printer is installed.

msh> bonjour location "location"

• Information about location can be entered using up to 32 alphanumeric characters.

Setting order of priority for each protocol

diprint

msh> bonjour diprint [0-99]

lpi

msh> bonjour lpr [0-99]

ipp

msh> bonjour ipp [0-99]

You can specify the order of priority for "diprint", "lpr", and "ipp". Smaller numbers indicate higher priority.

IP TTL setting

msh> bonjour ip ttl {1-255}

You can specify the IP TTL (the number of routers a packet can pass through).



• The default is 255.

Resetting the computer name and location information

You can reset the computer name and location information.

msh> bonjour clear {cname | location}

cname

Reset the computer name. The default computer name will be displayed when the computer is restarted.

location

Reset the location information. The previous location information will be deleted.

Interface configuration

msh> bonjour linklocal "interface_name"

- If many types of interface are installed, configure the interface that communicates with linklocal address.
- If you do not specify an interface, the Ethernet interface is automatically selected.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

devicename

Use the "devicename" command to display and change the printer name.

View settings

msh> devicename

Printer name configuration

msh> devicename name "string"

- Enter a printer name using up to 31 alphanumeric characters.
- Set single names for each printer.

Printer name initialization

msh> device name clearname

• Reset the printer name to its default.

dhcp

Use the "dhcp" command to configure DHCP settings.

View settings

The following command displays the current DHCP settings.

msh> dhcp

Configuration

You can configure DHCP.

msh> dhcp "interface_name" {on|off}

- Click {on} to enable DHCP. Click {off} to disable DHCP.
- If the DNS server address and domain name are obtained from DHCP, be sure to click {on}.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Current interface priority configuration display

msh> dhcp priority

Interface priority configuration

msh> dhcp priority "interface_name"

- You can select which interface has DHCP parameter priority.
- Priority settings are available when multiple interfaces are installed.

DNS server address selection

msh> dhcp dnsaddr {dhcp | static}

- Specify whether to obtain the DNS server address from the DHCP server or use the address set by a user.
- To obtain the DNS server address from the DHCP server, specify "dhcp". To use the address set by a user, specify "static".

Domain name selection

msh> dhcp domainname {dhcp | static}

- Specify whether to obtain the domain name from the DNS server or use the domain name set by a user.
- To obtain the domain name from the DHCP server, specify "dhcp". To use the domain name set by a user, specify "static".

dhcp6

Use the "dhcp6" command to display or configure DHCPv6 settings.

View settings

The following command displays the current DHCPv6 settings.

msh> dhcp6

DHCPv6-lite configuration and display

```
msh> dhcp6 "interface_name" lite {on|off}
```

Viewing and specifying DNS server address selection (obtained from the dhcpv6 server/user specified value)

msh> dhcp6 dnsaddr {dhcp|static}

DUID(DHCP unique ID) deletion and display

msh> dhcp6 duid clear

Viewing and specifying the time required to re-obtain the parameter obtained from dhcpv6

msh> dhcp6 option lifetime [0-65535]

- It can be entered between 0 and 65535 minutes.
- The default is 60 minutes.
- If you specify "0", you cannot re-obtain the value.

diprint

The direct printing port enables direct printing from a network-connected computer.

Use the "diprint" command to change direct printing port settings.

View settings

The following command displays the current direct printing port settings:

```
msh> diprint
Example output:
port 9100
timeout=300(sec)
bidirect on
conn multi
```

- apl async
 - The "port" specifies the port number of the direct printing port.
 - The "bidirect" setting indicates whether the direct printing port is bidirectional or not.

Setting timeout

```
msh> diprint timeout [30-65535]
```

- You can specify the timeout interval to use when the printer is expecting data from the network.
- The default is 300 seconds.

Specifying the number of concurrent connections

```
msh> diprint conn {multi|single}
```

- The above command specifies the number of concurrent diprint connections. Specify "multi" for multiple connections or "single" for a single connection.
- The default is "multi".

dns

Use the "dns" command to configure or display DNS (Domain Name System) settings.

View settings

The following command displays current DNS settings:

```
msh> dns
```

IPv4 DNS server configuration

The following command enables or disables the IPv4 DNS server address:

```
msh> dns "number" server "server address"
```

The following command displays a configuration using the IP address 192.168.15.16 on a DNS 1 server:

```
msh> dns 1 server 192.168.15.16
```

- You can register IPv4 DNS Server address.
- You can register up to three IPv4 DNS server numbers.
- You cannot use "255.255.255.255" as the DNS server address.

IPv6 DNS server configuration

The following command enables or disables the IPv6 DNS server address:

msh> dns "number" server6 "server address"

- You can register IPv6 DNS Server address.
- You can register up to three IPv6 DNS server numbers.

Dynamic DNS function setting

msh> dns "interface_name" ddns {on|off}

- You can set the dynamic DNS function "active" or "inactive".
- {on} means "active" and {off} means "inactive".
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Specifying the record overlap operation

msh> dns overlap {update|add}

- You can specify operations performed when records overlap.
- update

To delete old records and register new records.

add

To add new records and store the old records.

• When CNAME overlaps, it is always changed, irrespective of settings.

CNAME registration

msh> dns cname {on|off}

- You can specify whether to register CNAME.
- {on} means "active" and {off} means "inactive".
- The CNAME registered is the default name beginning with rnp. CNAME cannot be changed.

A records registration

msh> dns arecord {dhcp|own}

• {dhcp}

You can specify the method of registering an A record when the dynamic DNS function is enabled and DHCP is used.

• {own}

To register an A record using the printer as the DNS client.

The DNS server address and the domain name already designated are used for the registration.

Record updating interval settings

msh> dns interval "time"

- You can specify the interval after which records are updated when using the dynamic DNS function.
- The updating interval is specified hourly. It can be entered between 1 and 255 hours.
- The default is 24 hours.

resolv.conf display

msh> dns resolv

Specifying the protocol when asking names during dual stacking

msh> dns resolv protocol {ipv4|ipv6}

• Appears during dual stacking only.

domainname

Use the "domainname" command to display or configure the domain name settings.

You can configure the Ethernet interface or wireless LAN interface.

View settings

The following command displays the current domain name:

msh> domainname

Interface domain configuration

msh> domainname "interface_name"

Setting the domain name

msh> domainname "interface_name" name "domain name"

- A domain name can be entered using up to 63 alphanumeric characters.
- The Ethernet interface and wireless LAN interface will have the same domain name.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface	Interface set
ether	Ethernet interface

Interface	Interface set
wlan	Wireless LAN interface

Deleting the domain name

msh> domainname "interface_name" clear "name"

etherauth

Use "Ethernet" command to display or modify the authentication related parameters for Ethernet.

View settings

msh> etherauth

802.1x Configuration

msh> etherauth 8021x {on|off}

• {on} means "active" and {off} means "inactive".

etherconfig

Use the "etherconfig" command to view and configure the Ethernet parameters.

View settings

msh> etheconfig

Specify Ethernet Speed

msh> etherconfig speed {auto|10f|10h|100f|100h}

- auto = Auto Select
- 10f = 10 Mbps Full Duplex
- 10h = 10 Mbps Half Duplex
- 100f = 100 Mbps Full Duplex
- 100h = 100 Mbps Half Duplex

The default is "auto".

help

Use the "help" command to display the available command list and the procedures for using those commands.

Command list display

msh> help

Display of procedure for using commands

msh> help "command_name"

hostname

Use the "hostname" command to change the printer name.

View settings

msh> hostname

IPv4 Configuration

msh> hostname "interface_name" "printer_name"

- Enter the printer name using up to 63 alphanumeric characters.
- You cannot use a printer name starting with "RNP" or "rnp".
- The Ethernet interface and wireless LAN interface will have the same printer name.
- wlan can be specified only when the wireless LAN interface unit is installed.
- If you do not specify an interface, the Ethernet interface is selected automatically.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Initializing the printer name for each interface

msh>hostname "interface_name" clear "name"

ifconfig

Use the "ifconfig" command to view and configure TCP/IP (IP address, subnet mask, broadcast address, default gateway address) for the printer.

View settings

msh> ifconfig

IPv4 configuration

msh> ifconfig "interface name" "parameter" "address"

- If you did not enter an interface name, it is automatically set to the Ethernet interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet Interface
wlan	wireless LAN Interface

The following explains how to configure an IPv4 address 192.168.15.16 on Ethernet interface.

msh> ifconfig ether 192.168.15.16

IPv6 configuration

msh> ifconfig ether inet6 "interface_name" "prefixlen"

The following explains how to configure an IPv6 address to 2001:DB8::100 with prefix length 64 on the Ethernet interface.

msh> ifconfig ether inet6 2001:DB8::100 64

Netmask configuration

msh> ifconfig "interface name" netmask "address"

The following explains how to configure a subnet mask 255.255.255.0 on Ethernet interface.

msh> ifconfig ether netmask 255.255.255.0

Broadcast address configuration

msh> ifconfig "interface_name" broadcast "address"

Changing the interface

msh> ifconfig "interface" up

You can specify either the Ethernet interface or wireless LAN interface when using the optional wireless LAN interface unit is installed.



- To get the above addresses, contact your administrator.
- Use the default configuration if you cannot obtain setting addresses.
- The IP address, subnet mask and broadcast address are the same as that for the Ethernet interface and wireless LAN interface.
- TCP/IP configuration is the same for both Ethernet and wireless LAN interface. If interfaces are changed, the new interface inherits the configuration.
- Use "Ox" as the initial two letters of a hexadecimal address.

info

Use the "info" command to display printer information such as paper tray, output tray, and printer language.

Printer information display

msh> info



• For details about displayed contents, see "Getting Printer Information over the Network".



• p.259 "Getting Printer Information over the Network"

ipds

Use the "ipds" command to view and configure ipds settings.

Viewing settings

The following command displays the current ipds settings:

msh> ipds

Changing rhpp port number

msh> ipds port [1024-65535]

• The default is 5001.



• Can not use the port number of the 2501, 2601 and 9100.

Setting timeout

msh> ipds timeout [30-65535]

• The timeout function is disabled by default.

ipsec

Use the "ipsec" command to view and configure IPsec settings.

Viewing settings

The following command displays the current IPsec settings:

msh> ipsec



• For details about displayed contents, see "Transmission Using IPsec".

Reference

• p.350 "Transmission Using IPsec"

ipp

Use the "ipp" command to view and configure IPP settings.

Viewing settings

The following command displays the current IPP settings:

```
msh> ipp
```

IPP timeout configuration

Specify how many seconds the computer waits before canceling an interrupted print job. The time can be entered between 30 to 65535 seconds.

```
msh> ipp timeout [30 - 65535]
```

IPP user authorization configuration

Use IPP user authorization to restrict users to print with IPP. The default is "off".

```
msh> ipp auth {basic|digest|off}
```

- User authorization settings are "basic" and "digest".
- Use "off" to remove a user's authorization.
- If user authorization is specified, register a user name. You can register up to 10 users.

IPP user configuration

Configure IPP users according to the following messages:

```
msh> ipp user
```

The following message appears:

```
msh> Input user number (1 to 10):
```

Enter the number, user name, and password.

```
msh> IPP user name:user1
```

msh> IPP password:*****

After configuring the settings, the following message appears:

User configuration changed.

ipv6

Use the "ipv6" command to display and configure IPv6 settings.

View setting

msh> ipv6

IPv6 stateless address

msh> ipv6 stateless {on|off}

If "on" is selected, IPv6 requests information required for maintaining stateful connection to the router for as long as the printer power is turned on. This setting allows information from the router to be obtained constantly, and periodically refreshes the effective period of the stateless address.

lpr

Use the "lpr" command to view and configure LPR settings.

View setting

msh> 1pr

Checking host name when deleting the job

```
msh> lpr chkhost {on|off}
```

If "on" is selected, you can delete print jobs only from the IP address of the host that sent the print job. If LPR is disabled, you can also delete print jobs sent from IP addresses other than that of the host.

Printer Error Detection Function

```
lpr prnerrchk {on|off}
```

If you set this to "on", the printer stops receiving data and will wait until the error is resolved before continuing processing a job.

netware

Use the "netware" command to configure the NetWare settings such as the print server name or file server name.

Netware printer server names

msh> netware pname "character string"

• Enter the NetWare print server name using up to 47 characters.

Netware file server names

msh> netware fname

• Enter the NetWare file server name using up to 47 characters.

Encap type

msh> netware encap {802.3|802.2|snap|ethernet2|auto}

Remote printer number

msh> netware rnum {0-254}

Timeout

msh> netware timeout {3-255}

Printer server mode

msh> netware mode pserver
msh> netware mode ps

Remote printer mode

msh> netware mode rprinter
msh> netware mode rp

NDS context name

msh> netware context "character string"

SAP interval

msh> netware "sap_interval"

Setting login mode for file server

msh> netware login server

Setting login mode for NDS tree

msh> netware login tree

Setting login mode for NDS tree name

msh> netware tree "NDS name"

File transfer protocol

msh> netware trans {ipv4pri|ipxpri|ipv4|ipx}

If you do not specify the protocol, the current setting is displayed.

Protocol	Set Protocol
ipv4pri	IPv4+IPX(IPv4)
ipxpri	IPv4+IPX(IPX)
ipv4	IPv4
ірх	IPX

passwd

Use the "passwd" command to change the remote maintenance password.

Changing the password

msh> passwd

- Enter the current password.
- Enter the new password.

• Re-enter the new password to confirm it.

Changing the Password of the administrators using the supervisor

msh> passwd {Administrator ID}

- Enter the new password.
- Re-enter the new password to confirm it.



- Be sure not to forget or lose the password.
- The password can be entered using up to 32 alphanumeric characters. Passwords are case-sensitive. For example, "R" is not the same as "r".

pathmtu

Use the "pathmtu" command to display and configure the PathMTU Discovery service function.

View settings

msh> pathmtu

Configuration

msh> pathmtu {on|off}

- The default is "on".
- If the MTU size of the sent data is larger than the router's MTU, the router will declare it
 impassable, and communication will fail. If this happens, selecting the "pathmtu" to "off"
 optimized the MTU size and prevents data output failure.
- Depending on the environment, information might not be obtained from the router, and communication will fail. If this happens, select the "pathmtu" to "off".

prnlog

Use the "prnlog" command to obtain printer log information.

Print logs display

msh> prnlog

• Displays 16 previous print jobs.

msh> prnlog "ID Number"

 Specify the ID number of the displayed print log information to display additional details about a print job.



For details about displayed contents, see "Getting Printer Information over the Network".

■ Reference

• p.259 "Getting Printer Information over the Network"

rhpp

Use the "rhpp" command to view and configure RHPP settings.

View settings

msh> rhpp

Changing rhpp port number

msh> rhpp [1024-65535]

The default is 59100.

Setting timeout

msh> rhpp timeout [30-65535]

• The default is 300 seconds.



• "RHPP" is an abbreviation of "Reliable Host Printing Protocol", which is a manufacturer-original printing protocol.

route

Use the "route" command to view and control the routing table.

All route information display

msh> route get "destination"

• Specify the IPv4 address to destination.

"0.0.0.0" cannot be specified as destination address.

Enabling/disabling specified IPv4 destination

msh> route active {host|net} "destination" {on | off}

· You can turn the specified destination on or off. Host becomes the default setting.

Adding IPv4 Routing Table

msh> route add {host|net} "destination" "gateway"

- Adds a host or network route to "destination", and a gateway address to "gateway" in the table.
- Specify the IPv4 address to destination and gateway.
- Host becomes the default setting.

Setting default IPv4 Gateway

msh> route add default gateway

Deleting specified IPv4 destination from Routing Table

msh> route delete {host|net} "destination"

- Host becomes the default setting.
- IPv4 address of destination can be specified.

Setting IPv6 Default Gateway

msh> route add6 default gateway

Adding a specified IPv6 destination to Routing Table

msh> route add6 "destination" "prefixlen[1-128]" "gateway"

- Specify the IPv6 address to destination and gateway.
- If the prefix of the address is between 1 and 127, the network is selected. If the prefix of the address is 128, the host is selected.
- You cannot register a record that has the same destination and prefix as a registered record.
- You cannot register a record that uses "0000:0000:0000:0000:0000:0000:0000" as its destination.

Deleting a specified IPv6 destination from Routing Table

msh> route delete6 "destination" "prefixlen"

• Specify the IPv6 address to destination and gateway.

Display information about a specified IPv6 route information

msh> route get6 "destination"

• Specify the IPv6 address to destination and gateway.

Enabling/disabling a specified IPv6 destination

msh> route active6 "destination" "prefixlen" {on | off}

Route initialization

msh> route flush



- The maximum number of IPv4 routing tables is 16.
- The maximum number of IPv6 routing tables is 2.
- Set a gateway address when communicating with devices on an external network.
- The same gateway address is shared by all interfaces.
- "Prefixlen" is a number between 1 and 128.

E

set

Use the "set" command to set the protocol information display "active" or "inactive".

View settings

The following command displays protocol information (active/inactive).

```
msh> set ipv4
msh> set ipv6
msh> set ipsec
msh> set appletalk
msh> set netware
msh> set smb
msh> set protocol
```

When protocol is specified, information about IPv4, IPv6, IPsec, Apple Talk, Netware, and SMB appears.

```
msh> set parallel
msh> set usb
msh> set lpr
msh> set 1pr6
msh> set ftp
msh> set ftp6
msh> set rsh
msh> set rsh6
msh> set diprint
msh> set diprint6
msh> set web
msh> set snmp
msh> set ipp
msh> set ipp6
msh> set http
msh> set http6
msh> set bonjour
msh> set bonjour6
msh> set ssl
msh> set ss16
```

```
msh> set nrs
msh> set rfu
msh> set rfu6
msh> set nbt
msh> set ssdp
msh> set ssh
msh> set sftp6
msh> set sftp6
msh> set wsdev
msh> set wsdev6
msh> set ipds
msh> set rhpp
msh> set rhpp6
```

Configuration

• Enter "up" enable protocol, and enter "down" to disable protocol.

You can set the protocol to "active" or "inactive".

```
msh> set ipv4 {up | down}
```

- If you disable IPv4, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via IPv4.
- Disabling IPv4 also disables lpr, ftp, rsh, diprint, web, snmp, ssl, ipp, http, bonjour, and sftp.
 msh> set ipv6 {up | down}
- If you disable IPv6, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via IPv6.
- Disabling IPv6 also disables lpr6, ftp6, rsh6, diprint6, ssl6, ipp6, http6, and sftp6.

```
msh> set appletalk {up | down}
msh> set netware {up | down}
msh> set smb {up | down}
msh> set lpr {up | down}
msh> set lpr6 {up | down}
msh> set ftp {up | down}
msh> set ftp6 {up | down}
msh> set rsh6 {up | down}
msh> set rsh6 {up | down}
```

```
msh> set diprint {up | down}
msh> set diprint6 {up | down}
msh> set web {up | down}
msh> set snmp {up | down}
msh> set ipp {up | down}
msh> set ipp6 {up | down}
msh> set http {up | down}
msh> set http6 {up | down}
msh> set bonjour {up | down}
msh> set bonjour6 {up | down}
msh> set set ssl6 {up | down}
```

• If Secured Sockets Layer (SSL, an encryption protocol) function is not available for the printer, you cannot use the function by enabling it.

```
msh> set nrs {up | down}
msh> set rfu {up | down}
msh> set rfu6 {up | down}
msh> set ssh {up | down}
msh> set ssdp {up | down}
msh> set nbt {up | down}
msh> set sftp {up | down}
msh> set sftp {up | down}
msh> set sftp6 {up | down}
msh> set wsdev {up | down}
msh> set wsdev6 {up | down}
```

• If "wsdev" and "wsdev6" are enabled simultaneously, both appear as "up" on the protocol information display, but both use IPv4 for WS-Device and WS-Printer.

```
msh> set wsprn {up | down}
msh> set ipds {up | down}
msh> set rhpp {up | down}
msh> set rhpp6 {up | down}
```

show

Use the "show" command to display network interface board configuration settings.

View settings

msh> show

• If "-p" is added, you can view settings one by one.



• For details about the information displayed, see "Understanding the Displayed Information".

Reference

• p.265 "Understanding the Displayed Information"

slp

Use "slp" command to view and configure SLP settings.

msh> slp ttl "ttl_val"

- You can search the NetWare server using SLP in the PureIP environment of NetWare 5/5.1 and Netware 6/6.5. Using the "slp" command, you can configure the value of TTL which can be used by SLP multicast packet.
- The default value of TTL is 1. A search is executed only within a local segment. If the router does not support multicast, the settings are not available even if the TTL value is increased.
- The acceptable TTL value is between 1 and 255.

smb

Use the "smb" command to configure or delete the computer or workgroup name for SMB.

Computer Name settings

msh> smb comp "computer name"

 Set computer name using up to 15 characters. Names beginning with "RNP" or "rnp" cannot be entered.

Working Group Name settings

msh> smb group "work group name"

• Set workgroup name using up to 15 characters.

Comment settings

msh> smb comment "comment"

• Set comment using up to 31 characters.

Notify print job completion

msh> smb notif {on | off}

• To notify print job completion, specify "on". Otherwise, specify "off".

Deleting Computer Nam

msh> smb clear comp

Deleting Group Name

msh> smb clear group

Deleting Comment

msh> smb clear comment

View Protocol

msh> smb protocol

snmp

Use the "snmp" command to display and edit SNMP configuration settings such as the community name.

View settings

msh> snmp

• Default access settings 1 is as follows:

Community name:public

IPv4 address:0.0.0.0

IPv6 address:::

IPX address:00000000:000000000000

Access type:read-only

Effective Protocol: IPv4/IPv6/IPX

• Default access settings 2 is as follows:

Community name:admin

IPv4 address:0.0.0.0

IPv6 address:::

IPX address:00000000:000000000000

Access type:read-write

Effective Protocol: IPv4/IPv6/IPX

- If "-p" is added, you can view settings one by one.
- To display the current community, specify its registration number.

Display

msh> snmp ?

Community name configuration

msh> snmp "number" name "community_name"

- You can configure ten SNMP access settings numbered 1-10.
- The printer cannot be accessed from SmartDeviceMonitor for Admin or SmartDeviceMonitor for Client if "public" is not registered in numbers 1-10. When changing the community name, use SmartDeviceMonitor for Admin and SNMP Setup Tool to correspond with printer settings.
- The community name can be entered using up to 15 characters.

Deleting community name

msh> snmp "number" clear name

Access type configuration

msh> snmp "number" type "access_type"

Access type	Type of access permission
no	not accessible
read	read only
write	read and write
trap	user is notified of trapmessages

Protocol configuration

msh> snmp {ipv4|ipv6|ipx} {on|off}

- Use the following command to set protocols "active" or "inactive": If you set a protocol "inactive", all access settings for that protocol are disabled.
- Specify "ipv4" for IPv4, "ipv6" for IPv6, or "ipx" for IPX/SPX.
- {on} means "active" and {off} means "inactive".
- All protocols cannot be turned off concurrently.

Configuration of protocol for each registration number

msh> snmp "number" active {ipv4|ipv6|ipx} {on|off}

• To change the protocol of access settings, use the following command. However, if you have disabled a protocol with the above command, activating it here has no effect.

Access configuration

msh> snmp "number" {ipv4|ipv6|ipx} "address"

• You can configure a host address according to the protocol used.

- The network interface board accepts requests only from hosts that have IPv4, IPv6, and IPX
 addresses with access types of "read-only" or "read-write". Enter "0" to have network interface
 board accept requests from any host without requiring a specific type of access.
- Enter a host address to deliver "trap" access type information to.
- To specify IPv4 or IPv6, enter "ipv4" or "ipv6" followed by a space, and then the IPv4 or IPv6
 address.
- To specify IPX/SPX, enter "ipx" followed by a space, the IPX address followed by a decimal, and then the MAC address of the network interface board.

sysLocation configuration

msh> snmp location

Deleting sysLocation

msh> snmp clear location

sysContact setting

msh> snmp contact

Deleting sysContact

msh> snmp clear contact

SNMP v1v2 function configuration

msh> snmp v1v2 {on|off}

• Specify "on" to enable, and "off" to disable.

SNMP v3 function configuration

msh> snmp v3 {on|off}

• Specify "on" to enable, and "off" to disable.

SNMP TRAP configuration

 $msh > snmp trap \{v1|v2|v3\} \{on|off\}$

• Specify "on" to enable, and "off" to disable.

Remote Configuration Authorization configuration

msh> snmp remote {on|off}

Specify "on" to enable, and "off" to disable the SNMP v1v2 setting.

SNMP v3 TRAP configuration display

```
msh> snmp v3trap
msh> snmp v3trap {1-5}
```

If a number from 1-5 is entered, settings are displayed for that number only.

Configuring a sending address for SNMP v3 TRAP

msh> snmp v3trap {1-5} {ipv4|ipv6|ipx} "address"

Configuring a sending protocol for SNMP v3 TRAP

msh> snmp v3trap {1-5} active {ipv4|ipv6|ipx} {on|off}

Configuring a user account for SNMP v3 TRAP

msh> snmp v3trap {1-5} account "account_name"

Enter an account name using up to 32 alphanumeric characters.

Deleting an SNMP v3 TRAP user account

msh> snmp v3trap {1-5} clear account

Configuring an SNMP v3 encryption algorithm

msh> snmp v3auth {md5|sha1}

Configuring SNMP v3 encryption

msh> snmp v3priv {auto|on}

Set "auto" for automatic encryption configuration.

Set "on" for mandatory encryption configuration.

sntp

The printer clock can be synchronized with a NTP server clock using Simple Network Time Protocol (SNTP). Use the "sntp" command to change SNTP settings.

View settings

msh> sntp

NTP server address configuration

You can specify the IP address of the NTP server.

msh> sntp server "IP_address"

Interval configuration

msh> sntp interval "polling_time"

- You can specify the interval at which the printer synchronizes with the operator-specified NTP server. The default is 60 minutes.
- The interval can be entered from 0, or between 16 and 10,080 minutes.
- If you set 0, the printer synchronizes with the NTP server only when you turn the printer on. After that, the printer does not synchronize with the NTP server.

Time-zone configuration

msh> sntp timezone "+/-hour_time"

You can specify the time difference between the printer clock and NTP server clock. The values
are between -12:00 and +13:00.

spoolsw

Use the "spoolsw" command to view and configure Job Spool settings.

You can only specify diprint, lpr, ipp, ftp, smb and sftp protocol.

 The "spoolsw" command for configuring Job Spool settings is available only when the optional hard disk is installed.

View settings

The Job Spool setting appears.

```
msh> spoolsw
```

Job Spool setting

```
msh> spoolsw spool {on | off}
```



• Specify "on" to enable Job Spool, or "off" to disable it.

Resetting Job spool setting

```
msh> spoolsw clear job {on | off}
```

When the printer power is cut during job spooling, this determines whether to reprint the spooled
job.

Protocol configuration

```
msh> spoolsw diprint {on | off}
msh> spoolsw lpr {on | off}
msh> spoolsw ipp {on | off}
msh> spoolsw smb {on | off}
msh> spoolsw ftp {on | off}
msh> spoolsw sftp {on | off}
```

• You can specify the settings for diprint, lpr, ipp, smb and sftp.

```
msh> spoolsw wsprn {on|off}
```

ssdp

Use the "ssdp" command to view and configure SSDP settings.

View settings

msh> ssdp

Setting effective time

```
msh> ssdp profile {1801-86400}
```

The default is 10800 seconds.

Advertise packet TTL settings

```
msh> ssdp ttl {1-255}
```

The default is 4.

ssh

Use the "ssh" command to view and configure SSH settings.

View settings

msh> ssh

Data compression communication settings

```
msh> ssh compression {on|off}
```

The default is "on".

SSH/SFTP communication port setting

msh> ssh port {22, 1024-65535}

The default is 22.

SSH/SFTP communication timeout setting

```
msh> ssh timeout {0-65535}
```

The default is 300.

SSH/SFTP communication login timeout setting

```
msh> ssh logintimeout {0-65535}
```

The default is 300.

Setting an open key for SSH/SFTP

msh> ssh genkey {512|768|1024} "character string"

Create an open key for SSH/SFTP communication.

Usable characters are ASCII 0x20-0x7e (32 bytes) other than "0".

The default key length is 1024, and the character string is blank.

If you do not specify this parameter, an open key with the default value will be created.

Deleting open key for ssh/sftp communication

msh> ssh delkev



If you do not specify a character string, current setting is displayed.

Use the "status" command to display the printer status.

Messages

msh> status



• For details, see "Getting Printer Information over the Network".

Reference

• p.259 "Getting Printer Information over the Network"

syslog

Use the "syslog" command to display the information stored in the printer's system log.

View message

msh> syslog



• For details about the information displayed, see "Message List".

■ Reference

• p.277 "Message List"

upnp

Use the "upnp" command to display and configure the universal plug and play.

Public URL display

msh> upnp url

Public URL configuration

Msh< upnp url "string"

• Enter the URL string in the character string.

web

Use the "web" command to display and configure parameters on Web Image Monitor.

View Settings

msh> web

Ę

URL Configuration

You can set URLs linked by clicking URL on Web Image Monitor.

Specify "1" or "2" for x as the number corresponding to the URL. Up to two URLs can be registered and specified.

msh> web url http://"The URL or IP address you want to register"/

Deleting URLs registered as link destinations

```
msh> web x clear url
```

Specify "1" or "2" for x as the corresponding number to the URL.

Link name configuration

You can enter the name for URL that appears on Web Image Monitor.

Specify "1" or "2" for x as the corresponding number to the link name.

msh> web name "Name you want to display"

Resetting URL names registered as link destinations

```
msh> web x clear name
```

Specify "1" or "2" for x as the number corresponding to the link name.

Help URL Configuration

You can set URLs linked by clicking [Help] or [?] on Web Image Monitor.

msh> web help http://"Help URL or IP address"/help/

Deleting Help URL

msh> web clear help

wiconfig

Use the "wiconfig" command to make settings for wireless LAN.

View settings

msh> wiconfig

View wireless LAN settings

msh> wiconfig cardinfo

• If wireless LAN is not working correctly, its information is not displayed.

Configuration

msh> wiconfig "parameter"

Parameter	Value configured
mode {ap 802.11adhoc}	You can set infrastructure mode (ap), or 802.11 ad hoc mode (802.11adhoc).
	The default is infrastructure mode.
ssid "ID value"	You can make settings for the SSID in the infrastructure mode.
	Usable characters are ASCII 0x20-0x7e (32 bytes).
	An SSID value is set automatically to the nearest access point if no setting is made.
	If no setting is made for the ad hoc mode, the same value as for the infrastructure mode or an ASSID value is automatically set. The default is blank.
channel "channel no."	You can enable or disable the WEP function. To enable the WEP function, specify [on]; to disable it, specify [off].
	To start the WEP function, enter the correct WEP key. The default is "11".
key "key value" val {1 2 3 4}	You can specify the WEP key when entering in hexadecimal.
	With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.
	Up to four WEP keys can be registered. Specify the number to be registered with "val".
	When a WEP is specified by key, the WEP specified by key phrase is overwritten.
	To use this function, set the same key number and WEP key for all ports that transmit data to each other. Put "Ox" on the front of WEP key.
	You can omit the numbers with "val". The key number is set to 1 when making these omissions. The default is blank.
keyphrase "phrase" val {1 2 3 4}	You can specify the WEP key when entering in ASCII.

Parameter	Value configured
	With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.
	Up to four WEP keys can be registered. Specify the number to be registered with "val".
	When a WEP is specified by key phrase, the WEP specified by key is overwritten.
	To use this function, set the same key number and WEP key for all ports that transmit data to each other.
	You can omit the numbers with "val". The key number is set to 1 when making these omissions.
encval {1 2 3 4}	You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.
wepauth [open shared]	You can set an authorization mode when using WEP. The specified value and authorized mode are as follows:
	open: open system authorized (default)
	shared: shared key authorized rate
security {none wep wpa}	You can specify the security mode.
	none: No encryption(default)S
	wep: WEP encryption
	wpa: WPA encryption
wpaenc {tkip ccmp}	You can specify WPA encryption key when using WPA encryption.
	tkip: TKIP (default)
	ccmp: CCMP (AES)
wpaauth {wpapsk wpa}	You can specify the WPA authentication mode when using WPA encryption.
	wpapsk: WPA-PSK authentication(default)
	wpa: WPA(802.1X) authentication
	wpa2psk: WPA2-PSK authentication

Parameter	Value configured
	wpa2: WPA2 authentication
psk "character string"	You can specify the Pre-Shared key. Usable characters: ASCII 0x20-0x7e (8 to 63 bytes).
	The default is blank.
eap {tls ttls leap peap} {chap mschap mschapv2 pap md5 tls}	You can specify the EAP authentication type. tls: EAP-TLS (default)
	ttls: EAP-TTLS
	leap: LEAP
	peap: PEAP
	chap, mschap, mschapv2, pap, md5, or tls are settings for the phase 2 method, and must be set when using EAP-TTLS or PEAP.
	Do not make these settings when using other EAP authentication types.
	If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5.
	If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server.
	Usable characters: ASCII 0x20-0x7e(31 bytes) other than "@". The default is blank.
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication.
	Usable characters: ASCII 0x20-0x7e (31 bytes) other than "@". The default is blank.
domain "character string"	You can specify the login domain name for the Radius server.
	Usable characters: ASCII0x20-0x7e (31 bytes) other than "@". The default is blank.
password "character string"	You can specify the login password for the Radius server.

Parameter	Value configured
	Usable characters: ASCII 0x20-0x7e(128 bytes). The default is blank.
srvcert {on off}	You can set the server certificate. The default is "off".
imca {on off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and subdomain of the certificate server.
connectinfo	Obtains connection information.
claer {a each command all}	Returns the selected setting to its default value. If you specify "all", all settings will be restored to their default values.
miccheck {on off}	You can enable or disable the MIC check function.
	The default setting is "On" (enabled).
	If you specify "Off", you cannot perform MIC checks. We recommend you specify "On" for the MIC check function when using this printer.



• You can use this command only when the wireless LAN interface unit is installed.

wins

Use the "wins" command to configure WINS server settings.

Viewing settings

msh> wins

• If the IPv4 address obtained from DHCP differs from the WINS IPv4 address, the DHCP address is the valid address.

Configuration

msh> wins "interface_name" {on | off}

• {on} means "active" and {off} means "inactive".

- Be sure to specify the interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Address configuration

Use the following command to configure a WINS server IP address:

msh> wins "interface_name" {primary|secondary} "IP address"

- Use the "primary" command to configure a primary WINS server IPv4 address.
- Use the "secondary" command to configure a secondary WINS server IPv4 address.
- Do not use "255.255.255.255" as the IPv4 address.

NBT (NetBIOS over TCP/IP) Scope ID Selection

You can specify the NBT scope ID.

msh> wins "interface_name" scope "scope ID"

- The scope ID can be entered using up to 31 alphanumeric characters.
- Be sure to specify the interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

wsmfp

Use the "wsmfp" command to view and configure WSD (Device) and WSD (Printer) settings.

View settings

msh> wsmfp

Comment settings

msh> wsmfp comments "comment"

• If you do not specify a comment, current setting is displayed.

Location configuration

mah> wsmfp location "location"

• If you do not specify a comment, current setting is displayed.

Presentation URL configuration

msh> wsmfp url "URL"

• Enter the URL string in the "URL".

WSD (Device) TCP port configuration

msh> wsmfp devport "port_number"

• The Default is 53000.

WSD (Printer) TCP port configuration

msh> wsmfp prnport "port_number"

• The Default is 53001.

WSD (Printer) Timeout configuration

msh> wsmfp prntimeout [30-65535]

• The default is 900 seconds.

Comment initialization

msh> wsmfp clear comments

Location initialization

msh> wsmfp clear location

Presentation URL initialization

msh> wsmfp clear url

SNMP

Using the SNMP manager, you can get information about the printer.

The SNMP agent operating on UDP and IPX is incorporated into the built-in Ethernet board and optional wireless LAN interface unit of this printer.

This printer also supports SNMPv3, which increases user authentication, data encryption, and access control security.

To encrypt communication by SNMPv3, you must specify the printer's encrypted password.



 If you changed the printer's community name, change the configuration of the connected computer accordingly, using SNMP Setup Tool. For details, see SNMP Setup Tool Help.

The default community names are [public] and [admin]. You can get MIB information using these community names.

Start SNMP Setup Tool

• Windows 2000:

Click the [Start] button.

Point to [SmartDeviceMonitor for Admin] on the [Programs] menu.

Click [SNMP Setup Tool].

• Windows XP/Vista, Windows Server 2003/2003 R2/2008:

Click the [Start] button.

Point to [SmartDeviceMonitor for Admin] on the [All Programs] menu.

Click [SNMP Setup Tool].

5

Getting Printer Information over the Network

This section explains details of each item displayed in the printer status and information.

Current Printer Status

The printer status can be checked using the following commands:

- UNIX: Use the "lpq" command and "rsh", "rcp", "ftp" and "sftp" parameters.
- mshell: Use the "status" command.

Messages	Description
Adjusting	The printer is initializing or calibrating.
Call Service Center	There is a malfunction in the printer.
Canceling Job	The job is being reset.
Configuring	Setting is being changed.
Cooling Down Fusing Unit	Fusing unit is cooling down.
Cover Open: Duplex Unit	The cover of the duplex unit is open.
Cover Open: Exit/Rear Cover	The exit/rear cover is open.
Current Job Suspended	Current jobs are suspended.
Empty: Black Toner	The black toner cartridge is almost empty.
Energy Saver Mode	The printer is in Energy Saver Mode.
Error: DIMM Value	A memory error occurred.
Error: Ethernet Board	An Ethernet board error has occurred.
Error: HDD Board	A hard disk drive board error has occurred.
Error: Optional Font	An error has occurred in the font file of the printer.
Error: Optional RAM	An error has occurred in the SDRAM module.
Error: Parallel I/F Board	An error has occurred in the parallel interface.
Error: PDL	An error has occurred in the page description language.

Messages	Description
Error: Rem. Certificate Renewal	An error has occurred in the remote certificate renewal.
Error: USB Board	An error has occurred in the USB board.
Error: USB Interface	An error has occurred in the USB interface.
Error: Wireless Board	An error has occurred in the wireless LAN board.
Full: Log Data Capacity	Log data capacity is full.
Full: Waste Toner Bottle	Waste toner is full.
Hex Dump Mode	It is a hex dump mode.
Independent-supplier Toner	Toner that is not recommended is set.
In Use: Input Tray	The input tray is being used by other functions.
Jobs Suspended	All jobs are suspended.
Loading Toner	Toner is being supplied.
Log Data Transfer failed	Log transfer has failed.
Low: Black Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Low: Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Malfunction: Duplex Unit	There is a problem with duplex unit.
Malfunction:Lower Paper Tray(s)	There is a problem with the Lower Paper Tray.
Malfunction: Output Tray	There is a problem with output tray.
Memory Low: Data Storage	Memory shortage has occurred while the document was being accumulated.
Miscellaneous Error	Other error has occurred.
Mismatch: Paper Size	Indicated paper tray does not contain paper of selected size.
Mismatch: Paper Size and Type	Indicated paper tray does not contain paper of selected size and type.

Messages	Description
Mismatch: Paper Type	Indicated paper tray does not contain paper of selected type.
Near Replacing: Fusing Unit	Prepare the new fusing unit.
Near Replacing: Int. Transfer	Prepare the new Transfer Roller.
Nearly Full: Log Data Capacity	Log data capacity is nearly full.
Nearly Full: Waste Toner Bottle	Waste toner bottle is nearly full.
No Paper: Selected Tray	There is no paper in specified tray.
No Paper: Tray 1	There is no paper in tray 1.
No Paper: Tray 2	There is no paper in tray 2.
No Paper: Tray 3	There is no paper in tray 3.
Not Detected: Black Toner	Black toner is not correctly set.
Not Detected: Duplex Feed Unit	The duplex feed unit is not correctly set.
Not Detected: Duplex Unit	The duplex unit is not correctly set.
Not Detected: Fusing Unit	The fusing unit is not correctly set.
Not Detected: Input Tray	The paper feed tray is not correctly set.
Not Detected: Print Cartridge	The paper print cartridge is not correctly set.
Not Detected: Tray 1	Tray 1 is not correctly set.
Not Detected: Tray 2	Tray 2 is not correctly set.
Not Detected: Tray 3	Tray 3 is not correctly set.
Not Detected: WasteToner Bottle	Waste toner bottle is not correctly set.
Not Reached, Data Deleted	Unreached job is deleted.
Not Reached, Data Stored	Unreached job is preserved.
Offline	Printer is offline.
Operating Thermo-range Error	Exceeded appropriate thermo range.
Panel Off Mode	The printer is in Panel-Off mode.

Messages	Description
Paper in Duplex Unit	The paper remains in the duplex unit.
Paper Misfeed: Duplex Unit	The paper has jammed in the duplex unit.
Paper Misfeed: Input Tray	The paper has jammed in the input tray.
Paper Misfeed: Internal/Output	The paper has jammed inside the printer.
Paper Misfeed: Output Tray	The paper has jammed in the output tray.
Print Complete	The print was completed.
Printing	Printing is in progress.
Proxy Address/Port Incorrect	Proxy address or Port No. is incorrect.
Proxy User/Password Incorrect	Proxy user name or Password is incorrect.
RC Gate Connection Error	Failed connection with RC Gate.
Ready	The printer is ready to print.
Renewing Remote Certificate	Remote Certificate is Renewing.
Replace Charger Kit	It is time to replace the charger kit.
Replace Cleaning Web	It is time to replace the Cleaning Web.
Replace Fusing Unit	It is time to replace the fusing unit.
Replace Int. Transfer Unit	It is time to replace the transfer unit.
Replace Maintenance Kit	It is time to replace the Maintenance Kit.
Reset IPDS fonts	The IPDS fonts are being reset.
SD Card Authentication failed	SD card authentication failed.
Supplies Order Call failed	The supply order call has failed.
Tray Error: Duplex Printing	Selected paper tray cannot be used for duplex printing.
Warming Up	The printer is warming up.



• For details about UNIX commands, see UNIX Supplement.

• Check the error contents that may be printed in the configuration page. For details about printing a configuration page, see "List/Test Print Menu".

■ Reference

• p.141 "List/Test Print Menu"

Printer Configuration

You can check the printer configuration using telnet.

This section explains the checking procedure for input/output tray and printer language.

- UNIX: Use the "info" command and "rsh", "rcp", "ftp" and "sftp" parameters.
- mshell: Use the "info" command.

Input Tray

ltem	Description
No.	ID number of the paper tray
Name	Name of the paper tray
PaperSize	Size of paper loaded in the paper tray
status	Current status of the paper tray Normal: Normal
	NoInputTray: No trayPaperEnd: No paper

Output Tray

ltem	Description
No.	ID number of the output tray
Name	Name of the output tray
status	Current status of the output tray
	Normal: Normal
	PaperExist: Paper exist
	OverFlow: Paper is full
	Error: Other errors



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about mshell "info" commands, see "Remote Maintenance by telnet".

Reference

• p.218 "Remote Maintenance by telnet"

E

Understanding the Displayed Information

This section explains how to read status information returned by the network interface board.

Print Job Information

Use the following command to display print job information:

- UNIX: Use the "info" command and "rsh", "rcp", and "ftp" parameters.
- mshell: Use the "info" command.

ltem	Description
Rank	Print job status.
	Active
	Printing or preparing for printing.
	• 1st, 2nd, 3rd, 4th
	Waiting to be transferred to the printer.
Owner	Print request user name.
Job	Print request number.
Files	The name of the document.
Total Size	The size of the data (spooled).
	The default is 0 bytes.



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about mshell "info" commands, see "Remote Maintenance by telnet".

Reference

• p.218 "Remote Maintenance by telnet"

Print Log Information

This is a record of the most recent 16 jobs printed.

Use the following command to display print log information:

• UNIX: Use the "prnlog" command and "rsh", "rcp", and "ftp" parameters.

• telnet: Use the "prnlog" command. See "Remote Maintenance by telnet".

ltem	Description
ID	Print request ID.
User	Print request user name.
Page	Number of pages printed
Result	Print Request Result OK Print was completed normally. However, the print result may not be as required due to printer problems. NG Printing was not completed normally. Canceled An "rcp", "rsh", or "lpr" command print request was canceled, possibly due to the printing application. Not applicable to the "ftp" or "rprinter" command.
Time	Time the print requested was received. Time of print request reception
User ID	Printer driver-configured User ID. Appears when the print request ID is specified.
JobName	Name of the document for printing Appears when the print request ID is specified.



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about mshell "info" commands, see "Remote Maintenance by telnet".

■ Reference

• p.218 "Remote Maintenance by telnet"

Configuring the Network Interface Board

Use the following command to display network interface board settings:

• telnet: Use the "show" command.

	ltem	Description
Con	nmon	
	Mode	
	Protocol Up/Down	Protocol Settings
	AppleTalk	
	IPv4	
	IPv6	
	IPsec	
	NetWare	
	SMB	
	Device Up/Down	Device Settings
	Parallel	
	USB	
	Ethernet interface	
	Syslog priority	
	NVRAM version	
	Device name	
	Comment	
	Location	
	Contact	
	Soft switch	
App	oleTalk	AppleTalk settings

ltem		ltem	Description
	Мс	ode	
	Ne	ıt	
	Ob	ject	
	Тур	pe	
	Zo	ne	
TCI	P/IP		TCP/IP settings
	Mo	ode(IPv4)	
	Mo	ode(IPv6)	
		ftp	
		lpr	
		rsh	
		telnet	
		diprint	
		web	
		http	
		ftpc	
		snmp	
		ірр	
		autonet	
		bonjour	
		ssl	
		nrs	
		rfu	
		nbt	
		ssdp	

	ltem		Description
	ssh		
	sftp)	
	W:	SD (Device)	
	W:	SD (Printer)	
	ipo	ls	
	rhp	pp	
I	Pv4		
	DH	ICP	
	Ad	dress	
	Ne	etmask	
	Bro	padcast	
	Go	nteway	
I	IPv6		
	Sto	nteless .	
	Мо	anual	
	Go	ateway	
	End	сарТуре	
	DH	ICPv6-lite	
	DL	JID	
	DH	ICPv6 option lifetime	
ı	IPsec		
	Мо	anual Mode	
	Exc	cluded Protocol	
		https	
		dns	

	Item		Description
		dhcp	
		wins	
E	EncapT	уре	
F	Host na	me	
	DNS D	omain	
A	Access	Control	Access Control settings
	IPv	4	
		AccessEntry[X]	X can be set between 1 and 5.
	IPv	6	
		AccessEntry[X]	X can be set between 1 and 5.
S	sntp s	erver	Time settings
Т	Time Zo	one	
S	SNTP Server polling time		
S	SYSLOG server Home page URL1		Websys settings
H			
F	Home page linkname 1		
F	Home p	page URL2	
H	Home p	page linkname2	
H	Help po	age URL	
II	PDS Pc	ort	
11	PDS tin	neout	
R	RHPP Po	ort	
R	RHPP tir	meout	
NetV	Vare		
E	EncapT	уре	

ltem		Description
	RPRINTER number	
	Print server name	
	File server name	
	Context name	
	Switch	
	Mode	
	NDS/Bindery	
	Packet negotiation	
	Login Mode	
	Print job timeout	
	Protocol	
	SAP interval time	
	NDS Tree Name	
	Transfer Protocol	
SM	В	SMB settings
	Switch	
	Mode	
	Direct print	
	Notification	
	Workgroup name	
	Computer name	
	Comment	
	Share name[1]	
	Protocol	
Wi	reless LAN	Wireless LAN settings

Item	Description
Host Name	
Communication Mode	
SSID	
Channel	
Security	
WEP Authentication	
WEP Encryption key number	
WEP Encryption key number [X]	X can be set between 1 and 4.
WPA Encryption	
WPA Authentication	
Pre-Shared Key	
User name	
Domain name	
EAP Type	
Password	
Phase 2 user name	
Phase 2 Method TTLS	
Phase 2 Method PEAP	
Server cert.	
IntermediateCA	
Server ID	
Sub domain	
MIC check	
Ethernet	802.1X Authentication
DNS	DNS settings

ltem		Description
ı	Pv4	
	Server[X]	X can be set between 1 and 3.
	Selected IPv4 DNS Server	
I	Pv6	
	Server[X]	X can be set between 1 and 3.
	Selected IPv6 DNS Server	
F	Resolver Protocol	
Dom	ain Name	
•	ether	
\	wlan	
DDN	S	
•	ether	
\	wlan	
WIN	S	WINS settings
•	ether	
	Primary WINS	
	Secondary WINS	
	wlan	
	Primary WINS	
	Secondary WINS	
SSDI		SSDP settings
l	JUID	
F	Profile	
1	TL	
UPnF		UPnP settings

	ltem	Description
	URL	
Воі	njour	Bonjour (Rendezvous) settings
	Computer Name (cname)	
	Local Hostname (ether)	
	Local Hostname (wlan)	
	Location	
	Priority (diprint)	
	Priority (lpr)	
	Priority (ipp)	
	IP TTL	
	LinkLocal Route for Multil/F	
	IPP Port	
SN	MP	SNMP settings
	SNMPv1v2	
	SNMPv3	
	protocol	
	vlTrap	
	v2Trap	
	v3Trap	
	SNMPv1v2 Remote Setting	
	SNMPv3 Privacy	
ssh		ssh settings
	Compression	
	Port	
	TimeOut	

ltem		Description
	Login TimeOut	
Au	thFree	Authfree settings
	IPv4	
	AuthFreeEntry[X]	X can be set between 1 and 5.
	IPv6	
	AuthFreeEntry[X]	X can be set between 1 and 5
	Parallel	
	USB	
LPI	R	
	lprm check host	
	lpr prnerr chk	
Се	rtificate	
	Verification	
W	S-MFP	
	Network Device Name	
	Comments	
	Location	
	Presentation URL	
	WS-Device TCP Port	
	WS-Printer TCP Port	
	WS-Printer Job Timeout	
	MetadataVersion	
	UUID	
IEE	EE 802.1X	IEEE 802.1X settings
	User Name	

	Item	Description
	Domain Name	
	ЕАР Туре	
	Password	
	Phase 2 user name	
	Phase 2 Method TTLS	
	Phase 2 Method PEAP	
	Server cert	
	Intermediate CA	
	Server ID	
	Sub domain	
She	ell mode	Remote maintenance tool mode

Message List

This is a list of messages that appear in the printer's system log. The system log can be viewed using the "syslog" command.

System Log Information

Use the following command to display the system log information:

- UNIX: Use the "syslog" command and "rsh", "rcp", "ftp", and "sftp" parameters.
- telnet: Use the "syslog" command.

Message	Problem and solutions
account is unavailable: Same account name be used.	User account is disabled. This could be because it use the same account name as the administrator account.
account is unavailable: The authentication password is not set up.	User account is disabled. This could be because the authentication password is not set, and only the encryption account is set.
account is unavailable: encryption is impossible.	Encryption is not possible and account is disabled. This could be because:
	Security option is not installed.
	Encryption password has not been specified.
add_sess_IPv4: bad trap <ipv4 address="">, community:<community name=""></community></ipv4>	The IPv4 address (0.0.0.0.) is unavailable when the community access type is TRAP. Specify the host IPv4 address for the TRAP destination.
add_sess_IPv6: bad trap <ipv6 address="">, community: <community name=""></community></ipv6>	The IPv6 address [::] is unavailable when the community access type is TRAP. Specify the host IPv6 address for the TRAP destination.
add_sess_IPv4: community <community name=""> already defined.</community>	The same community name already exists. Use another community name.
add_sess_IPv6: community <community name=""> already defined.</community>	The same community name already exists. Use another community name.
adjust time server < NTP server> offset:XX sec.	ncsd tells you the timing of the NTP server and whether or not the time system clock is set.

Message	Problem and solutions
add_sess_IPX: bad trap <ipx address=""> community <community name=""></community></ipx>	The IPX address (00:00:00:00:00) is unavailable when the community access type is TRAP. Specify the host IPX address for the TRAP destination.
add_sess_IPX: community <community name=""> already defined.</community>	The same community name already exists. Use another community name.
child process exec error! (process name)	The network service failed to start. Turn the printer off and then on. If this does not work, contact your service or sales representative.
Client password rejected	The client's password was rejected. Check the client password.
Client tls certificate rejected	The client's TLS certificate was rejected. Check the certificate.
Connected DHCPv 6 Server (<dhcpv 6="" serveraddress="">).</dhcpv>	The IP address was successfully received from the DHCPv 6 server.
Current Interface Speed: xxxMbps	Speed of the network (10Mbps, 100 Mbps, or 1Gbps).
DHCPv6 server not found.	The DHCPv6 server was not found. Make sure that the DHCPv6 is on the network.
IEEE 802.11 <communication mode=""> mode</communication>	Displays Wireless LAN communication mode (infrastructure, or 802.11 ad hoc).
IEEE 802.11 Card does NOT support WPA.	A wireless card that does not support WPA is installed. Install a wireless card that supports WPA.
IEEE 802.11 Card Firmware REV. <version></version>	Displays the version number of the 802.11 card's firmware.
IEEE 802.11 current channel <channel number=""></channel>	Displays the current channel number of the active wireless card (in ad hoc and infrastructure mode).
IEEE 802.11 MAC Address = <mac address=""></mac>	Displays the MAC address of the wireless interface.
IEEE 802.11 SSID <ssid> (AP MAC Address <mac address="">)</mac></ssid>	The MAC address and SSID of the access point are connected in infrastructure mode.

Message	Problem and solutions
(IKE phase-1) mismatched authentication type: local= <authentication 1="" type=""> remote=<authentication 2="" type=""></authentication></authentication>	This machine's <authentication 1="" type=""> in IKE phase 1 does not match the communicating host's <authentication 2="" type="">, Make sure this machine's ISAKMP SA authentication type matches that of the communicating host.</authentication></authentication>
(IKE phase-1) mismatched encryption type: <encryption 1="" algorithm=""> remote=<encryption algorithm 2></encryption </encryption>	This machine's ISAKMP SA Oakley group <encryption 1="" algorithm=""> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group < encryption algorithm 2>, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.</encryption>
(IKE phase-1) mismatched DH group: local= <dh 1="" group="" number=""> remote=<dh 2="" group="" number=""></dh></dh>	This machine's ISAKMP SA Oakley group <dh 1="" group="" number=""> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group <dh 2="" group="" number="">, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.</dh></dh>
(IKE phase-1) mismatched hash type: local= <hash Algorithm 1> remote=<hash 2="" algorithm=""></hash></hash 	This machine's ISAKMP SA <hash 1="" algorithm=""> in IKE phase 1 does not match the communicating host's ISAKMP SA <hash 2="" algorithm="">, Make sure this machine's ISAKMP SA Hash Algorithm matches that of the communicating host.</hash></hash>
session IPv4 <community name=""> not defined.</community>	The requested community name is not defined.
session IPv6 <community name=""> not defined.</community>	The requested community name is not defined.
session_ipx <community name=""> not defined.</community>	The requested community name is not defined.
shutdown signal received. network service rebooting	The smbd service has started.
SMTPC: failed to get smtp server ip-address.	The SMTP server IP address could not be obtained. This could be because:
	The specified DNS server could not be found.
	No connection to the network has been established.
	The specified DNS server could not be found.
	An incorrect DNS server is specified.

Message	Problem and solutions
	The specified SMTP server IP address could not be found in the DNS server.
SMTPC: failed to connect smtp server. timeout.	Connection to the SMTP server failed due to timeout. This could be because the specified SMTP server name is incorrect, or no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server. Check the SMTP server name, or the network connection and configuration.
SMTPC: refused connect by smtp server.	Connection to the SMTP server is denied. This could be because server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.
SMTPC: no smtp server. connection close.	Connection to the SMTP server failed due to no response from SMTP. This could be because a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.
SMTPC: failed to connect smtp server.	Connection to the SMTP server failed. This could be because no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server, or the specified SMTP server name is incorrect, or the specified SMTP server IP address could not be found in the DNS server, or a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the DNS Server's IP address and SMTP server's IP address, or the SMTP server name and SMTP port number, or the SMTP server's SMTP port number, or the network connection and configuration.
SMTPC: username or password wasn't correct. [response code] (information)	Connection to the SMTP server failed, because the specified SMTP user name is incorrect, or the

Message	Problem and solutions
	specified SMTP password is incorrect. Check the SMTP user name and password.
Snmp over IPv4 is ready.	Communication over IPv4 with snmp is available.
Snmp over IPv6 is ready.	Communication over IPv6 with snmp is available.
Snmp over IPX is ready.	Communication over IPX with snmp is available.
trap account is unavailable.	v3Trap cannot be sent. This could be because the Trap destination account is different from the account specified by the printer.
Updated (option name) (value) via DHCPv6 Server	The parameter obtained from the DHCP server has been updated.
WSD (Device) started.	WSD (Device) has started.
WSD (Printer) started.	WSD (Printer) has started.



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about "syslog" command, see "Remote Maintenance by telnet".

■ Reference

• p.218 "Remote Maintenance by telnet"

6. Using a Printer Server

This chapter explains how to configure this printer to work as a network printer.

Preparing Printer Server

This section explains how to configure the printer as a Windows network printer. The printer is configured to enabling network clients to use it. When the network printer is connected via SmartDeviceMonitor for Client, you can set the printing notification function to notify clients of the results of their print jobs.

- Under Windows XP Professional or Windows Server 2003/2003 R2, to change printer properties
 in the [Printer] folder, you need Printer Management access authentication; under Windows Vista or
 Windows Server 2008, Full Control access authentication. Log on to the file server as an Administrator
 or member of the PowerUsers group.
- Open the [Printers and Faxes] window from the [Start] menu.
 The [Printers and Faxes] window appears.
- 2. Click the icon of the printer you want to use. On the [File] menu, click [Properties]. The printer properties appear.
- 3. On the [Sharing] tab, click [Share this printer].
- 4. To share the printer with users using a different version of Windows, click [Additional Drivers...].
 - If you have installed an alternative driver by selecting [Share As:] during the printer driver installation, this step can be ignored.
- 5. Click [OK], and then close the printer properties.

Printing notification via SmartDeviceMonitor for Client

Follow the procedure below to configure the printer to use the printing notification function of SmartDeviceMonitor for Client.

Setting the print server



Under Windows XP Professional or Windows Server 2003/2003 R2, to change printer properties
in the [Printer] folder, you need Printer Management access authentication; under Windows Vista or
Windows Server 2008, Full Control access authentication. Log on to the file server as an Administrator
or member of the PowerUsers group.

1. On the [Start] menu, point to [All Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Print Server Setting].

The print server setting dialog box appears.

2. Select the [Notify client PCs of printout/data-transmission] check box, and then click [OK].

After print server setting is made, a dialog box appears. Confirm the dialog box content, and click [OK].

Click [Cancel] to interrupt the procedure.

A dialog box appears for client setting.

3. Click [OK].

The print server setting is completed. Each client must be set to receive print notification.



- Current printing jobs restart from the beginning after the spooler pauses briefly.
- When the expansion function is not used, the function is automatically set as available.
- If you log on using an account that does not have Administrator privileges, the client may not be notified.
- For details, see "Using SmartDeviceMonitor for Client".



• p.208 "Using SmartDeviceMonitor for Client"

Setting a client

 On the [Start] menu, point to [All Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Extended Features Settings].

A dialog box for setting the expansion function appears.

- 2. Select the [Notify of printout/data-transmission when using print server] check box.
- 3. Click [OK].

The client setting is completed.



 Set the printing notification function on the printer driver as well as on SmartDeviceMonitor for Client.

Using NetWare

This section describes the setting procedure for network printers in the NetWare environment. In the NetWare environment, you can connect the printer as a "print server" or "remote printer".



IPv6 cannot be used on this function.

Setting procedure

- When using the printer as a print server
 - 1. Installing SmartDeviceMonitor for Admin
 - 2. Setting the network interface board.
 - 3. Turning the printer off and then back on.
- · When using the printer as a remote printer
 - 1. Installing SmartDeviceMonitor for Admin.
 - 2. Setting the network interface board.
 - 3. Setting NetWare.
 - 4. Starting the print server.



- This procedure assumes an environment is already prepared for normal NetWare running the printing service setting.
- The procedure is explained with the following example settings:
 - File server's name ... CAREE
 - Print server's name ... PSERV
 - Printer's name ...R-PRN
 - Queue name ...R-QUEUE

Using SmartDeviceMonitor for Admin

To use the printer in a NetWare environment, use SmartDeviceMonitor for Admin to set the NetWare printing environment.

Printers listed by SmartDeviceMonitor for Admin

SmartDeviceMonitor for Admin lists printers connected to the network. If you cannot identify the printer you want to configure, print configuration page, and then check the printer name.



- The NetWare Client provided by Novell is required to set the printing environment using SmartDeviceMonitor for Admin under the following environments:
 - NDS or Bindery mode in Windows 2000/XP

For details about SmartDeviceMonitor for Admin, see "Using SmartDeviceMonitor for Admin".

Reference

• p.194 "Using SmartDeviceMonitor for Admin"

Setting Up as a Print Server (NetWare 3.x)

Follow the procedure below to connect the printer as a print server using NetWare 3.x.

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and password appears.

- Enter the login user name and password, and then click [Login].
 For details about the login user name and password, consult your administrator.
- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
 - Print Server Name: Enter the NetWare print server name. To use the interface board as a print server, enter the name of a print server that is not active on the file server. Use up to 47 characters.
 - Logon Mode: Specify whether to designate a file server or NDS tree when logging on to NetWare
 - File Server Name: When a file server name is entered here, only the specified file server is searched for. This item is mandatory. Use up to 47 characters.
 - NDS Tree: To enable NDS mode, enter the name of the NDS tree you want to log on to. Use up to 32 alphanumeric characters.
 - NDS Context Name: To enable NDS mode, enter the print server context. Use up to 127 characters.
 - Operation Mode: Specify whether to use the interface board as a print server or a remote printer.
 - Remote Printer No.: This item is effective when the interface board is specified as a remote printer.
 Enter the same number as the number of the printer to be created on the print server (0 to 254 characters).
 - Job Timeout: When the interface board is used as a NetWare remote printer, the printer cannot
 detect when a print job ends. Therefore, the printer terminates printing when a certain period of
 time has elapsed since it last received print data (i.e., when it has not received print data for a
 certain period of time). Specify here this period of time (3 to 255 seconds). The initial value is
 15 (seconds).
 - Frame Type: Select the frame type from the drop-down menu.
 - Print Server Protocol: Select the protocol for NetWare from the drop-down menu.
 - NCP Delivery Protocol: Select the protocol for NCP delivery.

5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several before restarting Web Image Monitor.

6. Click [Logout].



- To check the configuration is correct, enter the following from the command prompt:
 - F:> USERLIST
- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.
 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Guide, which is the administrator's manual.



• p.185 "Using Web Image Monitor"

Setting Up as a Print Server (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to connect the printer as a print server using NetWare 4.x, NetWare 5 / 5.1, or NetWare 6 / 6.5.



- When using the printer as a print server in NetWare 4.x, NetWare 5 / 5.1, or NetWare 6 / 6.5, set it to the NDS mode.
- When using NetWare 5 / 5.1 or NetWare 6 / 6.5, set the printer as a print server.
- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and password appears.

- Enter the login user name and password, and then click [Login].
 For details about the login user name and password, consult your administrator.
- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- Confirm the settings, and then click [Device Name].
 Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

- 6. Click [Logout].
- 7. Quit Web Image Monitor.



To check the configuration is correct, enter the following from the command prompt:

F:> USFRIIST

- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.

 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

Reference

• p.185 "Using Web Image Monitor"

Using Pure IP in the NetWare 5 / 5.1 or 6 / 6.5 Environment

Follow the procedure below to connect the printer as a print server in a pure IP environment of NetWare 5/5.1 or NetWare 6/6.5.



- When creating a queued print server in a pure IP environment of NetWare 5 / 5.1 or NetWare 6 / 6.5, create a print queue on the file server using NetWare Administrator.
- This printer is not available as a remote printer for use in a pure IP environment.
- To use the printer in a pure IP environment, set it to IPv4.

Setting up using NWadmin

- 1. From Windows, start NWadmin.
 - For details about NWadmin, see the NetWare manuals.
- 2. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
- 3. In the [Class of new object] box, click [Print Queue], and then click [OK].
- 4. In the [Print Queue Name] box, enter the name of the print queue.
- 5. In the [Print Queue Volume] box, click [Browse].

- In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
- 7. Check the settings, and then click [Create].
- 8. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
- In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
- 10. In the [Printer name] box, enter the printer name.
- 11. Select the [Define additional properties] check box, and then click [Create].
- 12. Click [Assignments], and then click [Add] in the [Assignments] area.
- 13. In the [Available objects] box, click the queue you created, and then click [OK].
- Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
- 15. Click [Manual load] in the [Communication type] area, and then click [OK].
- 16. Check the settings, and then click [OK].
- 17. Select a context specified, and then click [Create] on the [Object] menu.
- In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].
- 19. In the [Print Server Name] box, enter the print server name.
 Use the same print server name specified using SmartDeviceMonitor for Admin.
- 20. Select the [Define additional properties] check box, and then click [Create].
- 21. Click [Assignments], and then click [Add] in the [Assignments] area.
- 22. In the [Available objects] box, click the queue you created, and then click [OK].
- 23. Check the settings, and then click [OK].
- 24. Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

To quit

CAREE: unload pserver

To start

CAREE: load pserver print_server_name

Setting up using Web Image Monitor

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

6

3. Enter the user login user name and password, and then click [Login].

For details about the login name and password, consult your administrator.

- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- 5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.
 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

Reference

• p.185 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 3.x)

Follow the procedure below to use the printer as a remote printer under NetWare 3.x.

Setting up using PCONSOLE

1. Enter "PCONSOLE" from the command prompt.

F:> PCONSOLE

2. Create a print queue.

When using the existing print queue, go to the procedure for creating a printer.

- 3. From the [Available Options] menu, select [Print Queue Information], and then press the [Enter] key.
- 4. Press [Insert] key, and then enter a print queue name.
- 5. Press [Esc] key to return to the [Available Options] menu.
- 6. Set up the network connection to a printer.
- On the [Available Options] menu, click [Print Server Information], and then press the [Enter] key.

8. To create a new print server, press the [Insert] key, and then enter a print server name.

For a currently defined print server, select a print server in the [Print Server] list.

Use the same printer name specified using SmartDeviceMonitor for Admin.

- 9. From the [Print Server Information] menu, select [Print Server Configuration].
- 10. From the [Print Server Configuration] menu, select [Printer Configuration].
- 11. Select the printer indicated as [Not Installed].

Use the same printer number specified as the remote printer number using SmartDeviceMonitor for Admin.

12. To change the printer name, enter a new name.

A name "printer x" is assigned to the printer. The "x" stands for the number of the selected printer.

13. As type, select [Remote Parallel, LPT1].

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

- 14. Press the [Esc] key, and then click [Yes] on the confirmation message.
- 15. Press the [Esc] key to return to [Print Server Configuration Menu].
- 16. Assign print queues to the created printer.
- 17. From [Print Server Configuration Menu], select [Queues Serviced By Printer].
- 18. Select the printer created.
- 19. Press the [Insert] key to select a queue serviced by the printer.

You can select several queues.

20. Follow the instructions on the screen to make other necessary settings.

Following these steps, check that the queues are assigned.

- 21. Press the [Esc] key until "Exit?" appears, and then select [Yes] to exit PCONSOLE.
- 22. Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

To quit

CAREE: unload pserver

To start

CAREE: load pserver print_server_name

If the printer works as configured, the message "Waiting for job" appears.

Setting up using Web Image Monitor

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

3. Enter the login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- 5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.
 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

Reference

• p.185 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to use the printer as a remote printer under NetWare 4.x, 5 / 5.1 and 6 / 6.5.

Important

- To use the printer as a remote printer under NetWare 4.x, 5 / 5.1, 6 / 6.5, set it to NDS mode.
- Do not use the printer as a remote printer when Pure IP is used.

Setting up using NWadmin

1. From Windows, start NWadmin.

For details about NWadmin, see the NetWare manuals.

- 2. Set up the network connection to a print queue. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
- 3. In the [Class of new object] box, click [Print Queue], and then click [OK].
- 4. In the [Print Queue Name] box, enter the name of the print queue.
- 5. In the [Print Queue Volume] box, click [Browse].

- In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
- 7. Check the settings, and then click [Create].
- 8. Set up the network connection to a printer. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
- 9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
- 10. In the [Printer name] box, enter the printer name.
- 11. Select the [Define additional properties] check box, and then click [Create].
- Assign print queues to the created printer. Click [Assignments, and then click [Add] in the [Assignments] area.
- 13. In the [Available objects] box, click the queue you created, and then click [OK].
- 14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
- 15. Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].
- 16. Set up the network connection to a print server. Select a context specified, and then click [Create] on the [Object] menu.
- 17. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Sever (Non NDPS)].
- 18. In the [Print Server Name:] box, enter the print server name.
 Use the same print server name specified using SmartDeviceMonitor for Admin.
- 19. Select the [Define additional properties] check box, and then click [Create].
- 20. Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.
- 21. In the [Available objects] box, click the queue you created, and then click [OK].
- 22. In the [Printers] area, click the printer you assigned, and then click [Printer Number].
- 23. Enter the printer number, and then click [OK]. Check the settings, and then click [OK].

 Use the same printer number specified as the remote printer number using SmartDeviceMonitor for Admin.
- 24. Start the print server by entering the following from the console of the NetWare server.

 If the print server is in operation, quit and restart it.

To exit

CAREE: unload pserver

To start

CAREE: load pserver print_server_name

- 25. Enter the printer server name as the context name, and then press the [Enter] key.
- 26. Select the printer name on the context menu, and then press the [Enter] key.

Setting up using Web Image Monitor

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

- 3. Enter the user login name and password, and then click [Login]. For details about the login user name and password, consult your administrator.
- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- 5. Confirm the settings, and then click [Device Name]. Configuration is now complete. Wait several minutes before restarting Web Image Monitor.
- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. For details about printing a configuration page, see "Test Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

Reference

• p.185 "Using Web Image Monitor"

7. Mac OS Configuration

This chapter explains how to use this printer with a Mac.

Mac OS

This section explains how to configure a Mac OS to use EtherTalk and USB.

The following explains how to configure Mac OS 9.1. If you are not using Mac OS 9.1, see the manual of the Mac OS you are using for details.



For Mac OS 8.6 and higher. (Mac OS X Classic environment is supported.)

Installing the PPD Files

It is necessary to install a PostScript Printer Description (PPD) files to print from a Mac OS.

Follow the procedure below to install a PPD file into a Mac OS using Mac OS 8.6 and higher.

- 1. Double-click the CD-ROM drive icon.
- 2. Double-click the [Mac OS 8 and 9] folder.
- 3. Double-click the [Printer Descriptions] folder.
- 4. Double-click the folder of the language you use.
- 5. Open the [Disk1] folder.
- 6. Drag the PPD file into [Printer Descriptions] in [Extensions] under [System Folder].
- 7. Restart the Mac OS.

Setting Up PPD Files



- Make sure that the printers are connected to an Apple Talk network before performing the following procedure.
- 1. On the [Apple] menu, click [Chooser].
- 2. Click the LaserWriter 8 icon.
- 3. In the [Select a PostScript Printer:] list, click the name of the printer you want to use.
- 4. Click [Create].
- 5. Click the printer you want to use, and then click [Select].

6. A PPD file is set up and the LaserWriter 8 icon appears at the left of the printer name in the list.

Creating a Desktop Printer Icon



Make sure that printers are connected to the USB before performing the following procedure.

To use a printer connected by USB, create a desktop printer icon.

- 1. Double-click [Utilities] folder under the [Applications (Mac OS 9)] folder.
- 2. Double-click [Desktop Printer Utility].
- Click [LaserWriter 8] in [With], click [Printer (USB)] Create Desktop, and then click [OK].
- 4. Click [Change] in [USB Printer Selection].
- 5. Select the model you are using in [Select a USB Printer:], and then click [OK].
- 6. Click [Create].
- 7. Enter the printer name, and then click [Save].
- 8. Quit Desktop Printer Utility.

Setting Up Options

- 1. On the [Apple] menu, click [Chooser].
- 2. Click the LaserWriter 8 icon.
- 3. In the [Select the PostScript Printer:] list, click the name of the printer you want to use, and then click [Setup...].
- 4. Click [Configure].

A list of options appears.

- 5. Select the option you want to set up, and then select an appropriate setting for it.
- 6. Click [OK].

The list of options closes.

7. Click [OK].

The [Chooser] dialog box appears.

8. Close the [Chooser] dialog box.



If the option you want to select is not displayed, PPD files may not be set up correctly. To complete
the setup, check the name of the PPD file displayed in the dialog box.

Changing to EtherTalk

Follow the procedure below to configure to a Mac OS to use EtherTalk.

- 1. Open [Control Panel], and then double-click the Apple Talk icon.
- 2. On the [Connect via:] pop-up menu, click [Ethernet].
- 3. If you change zones, select a name on the [OK] pop-up menu.
- 4. Close the Apple Talk control panel.
- 5. Restart the computer.



- The procedures used to configure Mac OS may vary depending on the Mac OS version. The
 following describes how to configure Mac OS 9.1. If you are using a different version of Mac
 OS, use the following procedures as a reference and see the manuals for your Mac OS version.
- Confirm the Connection to the Printer with TCP/IP.
- For information about installing applications required for EtherTalk, see the Mac OS manuals.

Mac OS X

This section explains how to configure a Mac OS X to use EtherTalk, USB, and TCP/IP.

Follow the procedure below to configure Mac OS X 10.3.8. If you are not using Mac OS X 10.3.8, see the manual of the Mac OS X you are using for details.



• For Mac OS X 10.1 or higher.



• The PPD files are stored in "Mac OS X:PPD Installer" on the CD-ROM.

Installing the PPD Files

Follow the procedure below to install a PPD file to print from Mac OS X.



- You need an administrator name and a password (phrase). For details, consult your administrator.
- 1. Insert the CD-ROM into the CD-ROM drive.
- 2. Double-click the CD-ROM drive icon.
- 3. Double-click the [Mac OS X] folder.
- 4. Double-click the [MacOSX PPD Installer] folder.
- 5. Double-click the installer icon.
- 6. Follow the instructions on the screen.

Setting Up the PPD File

1. Start Printer Setup Utility.

Under Mac OS X 10.5, start System Preferences and click [Print & FAX].

2. Click [Add] or [+] button.

Mac OS X 10.5

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment (AppleTalk, etc.).

If several AppleTalk zones exist on the network, select the zone the printer belongs to.

Mac OS X 10.4

Click [More Printers...]. Then select the zone from the second pop-up menu.

Other Mac OS X

Click [AppleTalk] on the first pop-up menu.

If the zone is set, select the zone from the second pop-up menu.

3. Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.

Under Mac OS X 10.4, select the printer you are using from the [Print Using] popup menu.

Under Mac OS X 10.5, select the printer you are using from the [Printer Name] list.

- 4. Select the PPD file for the model you are using, and then click [Add].
- 5. Quit Printer Setup Utility or System Preferences.

Setting Up Options

- 1. Start System Preferences.
- 2. Click [Print & Fax].
- In the [Printer] list, click the name of the printer you want to use, and then click [Printer Setup...].
- 4. Select the option you want to set up, and then select an appropriate setting for it.
- 5. Click [Apply Changes].



• If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

Using USB Interface

Follow the procedure below to setup USB connection.

1. Start Printer Setup Utility.

Under Mac OS X 10.5, start System Preferences and click [Print & FAX].

2. Click [Add] or [+] button.

Mac OS X 10.5

Click [Default].

Mac OS X 10.4

Click a printer that has "USB" indicated in the "Connection" column.

Other Mac OS X

Click [USB] on the pop-up menu.

The connected printer appears.

3. Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.

Under Mac OS X 10.4, you are using from the [Print Using] pop-up menu.

A list of printer types appears.

Under Mac OS X 10.5, select the printer you are using from the [Printer Name] list, and [kind] of USB.

- 4. Select the connected printer from the list of printer models, and then click [Add].
- 5. Quit Printer Setup Utility or System Preferences.



- When printing with a USB connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.
- USB2.0 can be used only with Mac OS X 10.3.3 or higher.

Using Bonjour

Follow the procedure below to print using Bonjour under Mac OS X 10.2.3 or higher. Ethernet, wireless LAN connections can also be used.

1. Start Printer Setup Utility.

Under Mac OS X 10.5, start System Preferences and click [Print & FAX].

2. Click [Add] or [+] button.

Mac OS X 10.5

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment (AppleTalk, etc.).

If several AppleTalk zones exist on the network, select the zone the printer belongs to.

Mac OS X 10.4

Click a printer that has "Bonjour" indicated in the "Connection" column.

Other Mac OS X

Click [Rendezvous] on the pop-up menu.

Select the name of the connected printer from the list of printer models, and then click [Add].

Under Mac OS X 10.4, Installable Options window appears. Select the option you want to set up, and then select an appropriate setting for it, and then [Continue].

Under Mac OS X 10.5, select the printer you are using from the [Printer Name] list, and [kind] of bonjour.

4. Quit Printer Setup Utility or System Preferences.

When printing with a Rendezvous connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.

Changing to EtherTalk

Follow the procedure below to configure a Mac OS X to use EtherTalk.



- You need an administrator name and a password (phrase). For details, consult your administrator
- 1. Open [System Preference], and then click the Network icon.
- 2. Click [Built-in Ethernet] in the [Show:] list box.
- 3. Click the [AppleTalk] tab.
- 4. Select the [Make AppleTalk Active] check box.
- 5. To change Apple Talk zones, select a name from the [AppleTalk Zone:] pop-up menu.
- 6. When the settings are made, click [Apply Now].
 Quit [System Preference].



For information about installing applications required for EtherTalk, see the Mac OS manuals.

Configuring the Printer

Use the control panel to enable Apple Talk. (The default is active.)

7

Using PostScript 3

Job Type

Use this to select the type of print job.

The following table shows the tabs or menus where you can select this function.

Mac OS X [Job Type:] on [Job Log] in the print dialog box.

You can select the following items:

Normal Print

Select this for normal printing. The print job starts immediately after the print command is given.

Sample Print

Use this function to print only one set of a multiple print jobs.

The other sets are saved in the printer. The saved job can be printed from the printer's control panel. You can also delete the saved job.



- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- Entering the "User ID:" helps you distinguish your print job from others.

Locked Print

Use this function to save documents in the printer memory with a password, and then edit and print them as you want.



- The "User ID:" can contain to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password" must be 4-8 digits.
- Entering the "User ID:" helps you distinguish your print job from others.

Hold Print

Use this function to temporarily hold a file in the printer, and print it from the computer or the printer's control panel later.



- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- Entering the "User ID:" helps you distinguish your print job from others.

panel later. **Note**

must be 4-8 diaits.

• The "User ID:" can contain up to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password"

Use this function to store a file in the printer, and then print it from the computer or the printer's control

- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- You can assign a password to a saved document, but password assignment is not mandatory.
- Entering the "User ID:" helps you distinguish your print job from others.

Store and Print

Use this function to prints the file at once and also stores the file in the printer.



- The "User ID:" can contain up to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password" must be 4-8 digits.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- You can assign a password to a saved document, but password assignment is not mandatory.
- Entering the "User ID:" helps you distinguish your print job from others.

Using sample print



- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print, Hold Print and Stored Print.
- Sample Print files will not appear on the display panel if they have already been executed or deleted using the Web browser before you select [Sample Print] from the control panel.
- Sample Print files printed or deleted using Web Image Monitor after you select [Sample Print] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Sample Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By default, sample print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.

- When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
- When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Sample Print file

1. In the application, on the [File] menu, click [Print].

The [Print] dialog box appears.

2. Set the number of copies to two or more.

The sample print job is sent to the printer, and one set is printed.

- 3. In the pop-up menu, click [Job Log].
- 4. On the [Job Type:] pop-up menu, select [Sample Print].
- 5. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

The user ID associates the user with his/her jobs.

6. Check the printed output to make sure the settings are correct.

If the settings are correct, perform the following steps to print the remaining sets.

If you want to delete a saved job, see "Sample Print".

Printing a selected Sample Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Sample Print], and then press the [# Enter] key.

Menu: Sample Print

Press the [▼] or [▲] key to display [Print One File], and then press the [# Enter] key

Sample Print: Print One File

A list of Sample Print files stored in the printer appears.

4. Press the [▼] or [▲] key to display the file you want to print, and then press the [# Enter] key.

Select File: 06:08PM user001

Enter the number of sets you want to print using the [▲] or [▼] keys, and then press the [# Enter] key.

You can enter up to 999 sets.

6. Press the [Escape] key 1-4 times.

The initial screen appears.

Printing all Sample Print files

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Sample Print], and then press the [# Enter] key.

Menu: Sample Print

3. Press the [♥] or [♠] key to display [Print All Files], and then press the [# Enter] key.

The user ID when the job was stored appears.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

```
Select User ID:
user001
```

5. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

Enter the number of sets you want to print using the [▲] or [▼] keys, and then press the [# Enter] key.

You can enter up to 999 sets.

7. Press the [Escape] key 1-4 times.

The initial screen appears.



- When printing finishes, the stored file is deleted.
- To stop printing after printing has started, press the [JobReset] key. The file will be deleted.
- If there is a print job outstanding, this is printed before the sample print job.

Reference

• p.97 "Sample Print"

Deleting a selected Sample Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

- 2. Press the [▼] or [▲] key to display [Sample Print], and then press the [# Enter] key.
- Press the [▼] or [▲] key to display [Delete One File], and then press the [# Enter] key.
 The file name and the time when the job was stored appear.
- Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

To cancel deleting a Sample Print file, press the [Escape] key.

- 5. Check the file you want to delete is displayed, and then press the [# Enter] key.
 - The "Deleted" message appears. Then the file selection screen reappears.
- 6. Press the [Menu] key.

The initial screen appears.

Deleting all Sample Print files

1. Press the [Menu] key.

The [Menu] screen appears.

- Press the [▼] or [▲] key to display [Sample Print], and then press the [# Enter] key.
- Press the [▼] or [▲] key to display [Del. All Files], and then press the [# Enter] key.
 The user ID when the job was stored appear.
- 4. Press the [♥] or [♠] key to display the user ID for the file you want to delete, and then press the [# Enter] key.

To cancel deleting a Sample Print file, press the [Escape] key.

5. The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

The "Deleted" message appears. Then the file selection screen reappears.

6. Press the [Menu] key.

The initial screen appears.

Using locked print



- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- The number of pages the printer can save varies depending on the contents of the print images. At
 most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print and Hold Print.
- Locked Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [Locked Print] using the control panel.

- Locked Print files printed or deleted using Web Image Monitor after you have selected [Locked Print]
 using the control panel will still appear on the display panel. However, an error message will appear
 if you try to print or delete those Locked Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By
 default, locked print jobs are automatically collated by the printer driver. If the collate option is selected
 in the application print dialog box, more prints than intended may be printed.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
 - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Locked Print file

1. In the application, click [Print] on the [File] menu.

The [Print] dialog box appears.

- 2. In the pop-up menu, click [Job Log].
- 3. On the [Job Type:] pop-up menu, click [Locked Print].
- 4. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box.

The user ID associates the user with his/her jobs.

5. After making the necessary settings, click [Print].

The document file is saved in the printer.

To print the document, perform the following steps.

To delete the document, see "Locked Print".

Printing a selected Locked Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Locked Print], and then press the [# Enter] key.

Menu:

Locked Print

3. Press the [▼] or [▲] key to display [Print One File], and then press the [# Enter] key.

Locked Print: Print One File

The file name and the time when the job was stored appear.

4. Press the [♥] or [♠] key to display the file you want to print, and then press the [# Enter] key.

Select File: 06:23PM user001

The password screen appears.

5. Enter the password using the [♥] or [♠] key, and then press the [# Enter] key.

Password ****

If you forget your password, ask your administrator for help.

Check that the file you want to print is displayed

To cancel printing, press the [Escape] key.

6. Press the [# Enter] key.

06:23PM user001 Press # to set

7. Press the [Escape] key 1-4 times.

To print, press [Esc] 1-4 times

The initial screen appears.

7

Printing all Locked Print file

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Locked Print], and then press the [# Enter] key.

Menu: Locked Print

3. Press the [▼] or [▲] key to display [Print All Files], and then press the [# Enter] key.

Locked Print: Print All Files

The user ID when the job was stored appears.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

Select User ID: user001

The password screen appears.

5. Enter the password using the [▼] or [▲] key, and then press the [# Enter] key.

Password ****

If you forget your password, ask your administrator for help.

6. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press # to set The printer prints files that correspond to the entered password. The number of files to be printed is displayed on the confirmation screen.

To print files that do not correspond to the entered password, repeat the procedure and specify the appropriate password.

7. Check the file you want to print is displayed, and then press the [# Enter] key.

```
Select File:
06:23PM user001
```

8. Press [Escape] key 1-4 times.

```
To print, press
[Esc] 1-4 times
```

The initial screen appears.



- When printing finishes, the stored file is deleted.
- To stop printing after printing has started, press the [JobReset] key. The file will be deleted.

Reference

• p.103 "Locked Print"

Deleting a selected Locked Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

- 2. Press the [♥] or [♠] key to display [Locked Print], and then press the [# Enter] key.
- Press the [▼] or [▲] key to display [Delete One File], and then press the [# Enter] key.
 The file name and the time when the job was stored appear.
- Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

The password screen appears.

- Enter the password using the [▼] or [▲] key, and then press the [# Enter] key.
 If you forget your password, ask your administrator for help.
- 6. Check the file you want to delete is displayed, and then press the [# Enter] key.

 The "Deleted" message appears.

7. Press the [Menu] key.

The initial screen appears.

Deleting all Locked Print files

1. Press the [Menu] key.

The [Menu] screen appears.

- Press the [▼] or [▲] key to display [Locked Print], and then press the [# Enter] key.
- Press the [▼] or [▲] key to display [Del. All Files], and then press the [# Enter] key.
 The user ID when the job was stored appear.
- Press the [▼] or [▲] key to display the user ID for the file you want to delete, and then press
 the [# Enter] key.

The password screen appears.

To cancel deleting a Locked Print file, press the [Escape] key.

Enter the password using the [▼] or [▲] key, and then press the [# Enter] key.

If you forget your password, ask your administrator for help.

The printer deletes files that correspond to the entered password. The number of files to be deleted is displayed on the confirmation screen.

The printer deletes documents that correspond to the entered password. To delete documents that do not correspond to the entered password, repeat the procedure and specify the appropriate password.

6. The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

The "Deleted" message appears.

7. Press the [Menu] key.

The initial screen appears.

Using hold print

Important

- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- The number of pages the printer can save varies depending on the contents of the print images. At
 most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print and Hold Print.
- Hold Print files will not appear on the display panel if they have already been printed or deleted using
 Web Image Monitor before you select [Hold Print] using the control panel.

- Hold Print files printed or deleted using Web Image Monitor after you have selected [Hold Print] using
 the control panel will still appear on the display panel. However, an error message will appear if you
 try to print or delete those Hold Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By default, Hold print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
 - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Hold Print file

1. In the application, click [Print] on the [File] menu.

The [Print] dialog box appears.

- 2. In the pop-up menu, click [Job Log].
- 3. On the [Job Type:] pop-up menu, click [Hold Print].
- 4. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. File Name can also be set.

The user ID associates the user with his/her jobs.

5. After making the necessary settings, click [Print].

The document file is saved in the printer.

To print the document, perform the following steps.

To delete the document, see "Hold Print".

Printing a selected Hold Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] to display key [Hold Print], and then press the [# Enter] key.

Menu:

Hold Print

3. Press the [▼] or [▲] to display key [Print One File], and then press the [# Enter] key.

Hold Print: Print One File

The file name and the time when the job was stored appear.

Press the [▼] or [▲] key to display the file you want to print, and then press the [# Enter] key.

Select File: 06:51PM user001

To cancel printing, press the [Escape] key.

5. Press the [# Enter] key.

06:51PM user001 Press # to set

6. Press [Escape] key 1-4 times.

To print, press [Esc] 1-4 times

The initial screen appears.

Printing all Hold Print files

Press the [Menu] key.
 The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Hold Print], and then press the [# Enter] key.

Menu: Hold Print Hold Print: Print All Files

The user ID when the job was stored appear.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

Select User ID: user001

5. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press # to set

6. Check the file you want to print is displayed, and then press the [# Enter] key.

06:51PM user001 Press # to set

7. Press the [Escape] key 1-4 times.

To print, press [Esc] 1-4 times

The initial screen appears.

- **U** Note
 - To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
 - When printing is completed, the stored file is deleted.
- Reference
 - p.109 "Hold Print"

Deleting a selected Hold Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

- 2. Press the [♥] or [♠] key to display [Hold Print], and then press the [# Enter] key.
- Press the [▼] or [▲] key to display [Delete One File], and then press the [# Enter] key.
 The file name and the time when the job was stored appear.
- Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

To cancel deleting a Hold Print file, press the [Escape] key.

5. Check the file you want to delete is displayed, and then press the [# Enter] key.

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.

Deleting all Hold Print files

1. Press the [Menu] key.

The [Menu] screen appears.

- Press the [▼] or [▲] key to display [Hold Print], and then press the [# Enter] key.
- Press the [▼] or [▲] key to display [Del. All Files], and then press the [# Enter] key.
 The user ID when the job was stored appear.
- Press the [▼] or [▲] key to display the user ID for the file you want to delete, and then press
 the [# Enter] key.

To cancel deleting a Hold Print file, press the [Escape] key.

The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.

Using stored print



- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.

- Stored Print files printed or deleted using Web Image Monitor after you have selected [Stored Print]
 using the control panel will still appear on the display panel. However, an error message will appear
 if you try to print or delete those Stored Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By
 default, Stored print jobs are automatically collated by the printer driver. If the collate option is selected
 in the application print dialog box, more prints than intended may be printed.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
 - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Stored Print file

1. In the application, click [Print] on the [File] menu.

The [Print] dialog box appears.

- 2. In the pop-up menu, click [Job Log].
- 3. On the [Job Type:] pop-up menu, click [Stored Print] or [Store and Print].
 - [Stored Print]

Stores the file in the printer and print it later using the control panel.

• [Store and Print]

Prints the file at once and also stores the file in the printer.

4. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box. File Name can also be set.

The user ID associates the user with his/her jobs.

You can assign a password to a saved document, but password assignment is not mandatory.

The password must be entered when printing or deleting.

5. After making the necessary settings, click [Print].

The document file is saved in the printer.

To print the document, perform the following steps.

To delete the document, see "Stored Print".

7

Printing a selected Stored Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [♥] or [♠] key to display [Stored Print], and then press the [# Enter] key.

Menu: Stored Print

3. Press the [▼] or [▲] key to display [Print One File], and then press the [# Enter] key.

Stored Print: Print One File

The file name and the time when the job was stored appear.

To cancel printing, press the [Escape] key.

Press the [▼] or [▲] key to display the file you want to print, and then press the [# Enter] key.

Select File: 07:04PM user001

If you set a password in the printer driver, a password confirmation screen appears. Enter the password.

 Enter the number of sets you want to print using the [▲] or [▼] keys, and the press the the [# Enter] key.

Qty 1(1-999) Set Qty/Press #

You can enter up to 999 sets.

6. Press the [Escape] key1-4 times.

To print, press [Esc] 1-4 times The initial screen appears.

Printing all Stored Print files

1. Press the [Menu] key.

The [Menu] screen appears.

2. Press the [▼] or [▲] key to display [Stored Print], and then press the [# Enter] key.

Menu: Stored Print

3. Press the [▼] or [▲] key to display [Print All Files], and then press the [# Enter] key.

Stored Print: Print All Files

The user ID when the job was stored appear.

4. Press the [▼] or [▲] key to display the user ID for the file you want to print, and then press the [# Enter] key.

Select User ID: user001

5. The number of documents selected for printing is displayed. Check the number, and if it is correct, press the [# Enter] key.

No. of Files 1 Press # to set

Enter the number of sets you want to print using the [♠] or [♥] keys, and then press the [# Enter] key.

Qty 1(1-999) Set Qty/Press #

You can enter up to 999 sets.

7. Press the [Escape] key 1-4 times.

The initial screen appears.



• Stored Print files sent to the printer is not deleted unless you delete them in the printer, or enable automatic deletion of Stored Print files.

Reference

• p.115 "Stored Print"

Deleting a selected Stored Print file only

1. Press the [Menu] key.

The [Menu] screen appears.

- 2. Press the [▼] or [▲] key to display [Stored Print], and then press the [# Enter] key.
- 3. Press the [♥] or [♠] key to display [Delete One File], and then press the [# Enter] key.

 The file name and the time when the job was stored appear.
- Press the [▼] or [▲] key to display the file you want to delete, and then press the [# Enter] key.

To cancel deleting a Stored Print file, press the [Escape] key.

If you set the password in the printer driver, enter the password to delete.

If you forget your password, ask your administrator for help.

5. Check the file you want to delete is displayed, and then press the [# Enter] key.

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.

Deleting all Stored Print files

1. Press the [Menu] key.

The [Menu] screen appears.

- 2. Press the [♥] or [♠] key to display [Stored Print], and then press the [♯ Enter] key.
- Press the [▼] or [▲] key to display [Del. All Files], and then press the [# Enter] key.

The user ID when the job was stored appear.

 Press the [▼] or [▲] key to display the user ID for the file you want to delete, and then press the [# Enter] key.

To cancel deleting a Stored Print file, press the [Escape] key.

If you set the password in the printer driver, enter the password to delete.

If you forget your password, ask your administrator for help.

The number of documents selected for deletion is displayed. Check the number, and if it is correct, press the [# Enter] key.

The "Deleted" message appears.

6. Press the [Menu] key.

The initial screen appears.



• If you have already set a password in the printer driver, enter it to delete.

User Code

Use this to set a user code for print logging.

Enter a user code using up to eight digits. A user code identifies a group of users and allows you to check the number of sheets printed under each code with SmartDeviceMonitor for Admin.

The following table shows the tabs or menus where you can select this function.

Mac OS X	Select the [Enable User Code] check box, and then
	enter a user code in the [User Code] box on [Job
	Log] in the print dialog box.

Paper Size

Use this to select the size of paper you want to use.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Paper:] on the [Page Attributes] tab in the Page Setup dialog box.
Mac OS X	[Paper Size:] in the Page Setup dialog box.



• For details about the paper sizes supported by this printer, see "Paper and Other Media", Hardware Guide.

Fit to Paper

When the size of the document and paper size differ, set whether or not to print according to paper size.

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Mac OS	[Fit to Paper] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Fit to Paper] on the [Features x] tab on [Printer Features] in the print dialog box.

Prompt User

Print is performed with the size of document to be printed unchanged.

Nearest Size and Scale

If the paper size is smaller than the selected paper size, the driver reduces the print size.

If the paper size is larger than the size of document to be printed, print is not to fit the paper size.

Nearest Size and Crop

When the paper size is smaller than the size of document to be printed, print is adjusted to meet the paper size.

Input Slot

Use this to select the paper sources.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Paper Source:] on [General] in the print dialog box.
Mac OS X	[Paper Feed] in the print dialog box.



• For details about the paper sources, see "Paper and Other Media", Hardware Guide.

Duplex Printing

Use this function to select duplex printing.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Print on Both Sides] on [Layout] in the print dialog box.
Mac OS X	• 10.3 or higher
	The [Two Sided Printing] check box on [Layout] in the print dialog box.

Other Mac OS X
The [Print on both Sides] check box on [Duplex] in the print dialog box.

None

Disables duplex printing.

Flip on Long Edge

Prints so you can open it to the long edge when bound along the long edge.

Flip on Short Edge

Prints so you can open it to the short edge when bound along the short edge.

Toner Saving

Use this function to reduce the amount of toner used when printing.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Print Mode] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Print Mode] on the [Feature Set: x] tab on [Printer Features] in the print dialog box.



• For details about this function, see printer driver Help.

Collate

Use this function to enable collation. With this feature, the printer can efficiently print collated sets of multiple-page documents.



- Make sure that the following check boxes have not been selected.
 - Mac OS

The [Collate] check box in the print dialog box.

Mac OS X

The [Collate] check box on [Copies & Pages] in the printer dialog box.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Collate] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Collate] on the [Features: Set x] tab on [Printer Feature] in the printer dialog box.

Paper Type

Use this to select the paper type.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Paper Type:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Paper Type] on the [Feature Set: x] tab on [Printer Features] in the print dialog box.



 For details about the media type supported by this printer, see "Paper and Other Media", Hardware Guide.

Dithering

Use this function to set the Image Rendering mode.

The following table shows the tabs or menus where you can select this function.

Mac OS	Dithering: on Printer Specific Options in the print dialog box.
Mac OS X	Dithering: on the Feature Set: x tab on Printer Features in the print dialog box.

You can select the following items:

Auto

Use this setting to configure the best dithering method automatically depending on the appearance of the document to be printed.

Photographic

Performs dithering using an appropriate pattern for photographs.

Text

Performs dithering using an appropriate pattern for text.

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Printer Utility for Mac

By using Printer Utility for Mac, you can download fonts, change the name of the printer and so on.



• If a Macintosh and printer are connected by USB, you cannot use Printer Utility for Mac.



- Printer Utility for Mac is included on the CD-ROM labeled "Printer Drivers and Utilities".
- Printer Utility for Mac requires Mac OS 7.6.1-9.x, or Mac OS X 10.1.x or 10.2.1. Mac OS X 10.0.x and 10.2 are not supported.

Installing Printer Utility for Mac

Follow these steps to install Printer Utility for Mac on the printer.

- 1. Start the Macintosh.
- 2. Insert the CD-ROM into the CD-ROM drive.

The CD-ROM icon appears.

3. Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

4. Double-click the [Mac OS 8 and 9] icon to open it.

Under Mac OS X, double-click the [Mac OS X] folder.

- Double-click the [PS Utility] folder on the CD-ROM, and then drag the [Printer Utility for Mac] file, and then drop it into the Macintosh hard disk.
- 6. Drag the CD-ROM icon and drop it into [Trash] to eject the CD-ROM.

Printer Utility for Mac is installed.



- Printer Utility for Mac is included on the CD-ROM labeled "Printer Drivers and Utilities".
- Printer Utility for Mac requires Mac OS 8.1 or higher. (Mac OS X Classic environment is supported.)
- Printer Utility for Mac cannot use Mac OS X (native mode).

Starting Printer Utility for Mac

Mac OS

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- Before starting Printer Utility for Mac, make sure the printer is selected in [Chooser] on the Apple menu.
- Double-click the Printer Utility for Mac icon.

The [Printer Utility for Mac] dialog box appears.

2. Click [OK].

Printer Utility for Mac will take a few seconds to start.

Mac OS X

1. Double-click the Printer Utility for Mac icon.

The [Printer Utility for Mac] dialog box appears.

- 2. Click [OK].
- 3. In the [Available Printers:] box, select the printer you want to use.

If you change zones, select a name from [Available Network Zones:].

Click [Choose Printer...] on the Printer Utility for Mac menu if you want to change the printer.

4. Select the printer you want to use.

Printer Utility for Mac will take a few seconds to start.

5. Click [Choose].

Printer Utility for Mac Functions

Downloading PS fonts

You can download the PS fonts to the printer memory or hard disk drive.

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- The following procedure to download the fonts assumes that you are an administrator. If you are not, be sure to consult your administrator.
- During the download, do not turn off the power switch, operate the panel or open or close the cover.
- If the printer restarts, all the printer settings return to the defaults.

- Confirm that a Macintosh and the printer are connected with Apple Talk.
- 1. Select [Download PS Fonts...] on the [File] menu.
- 2. Click [Add to list].

The dialog box to select fonts appears.

3. Select the desired font files, and then click [Open].

The list of selectable font names appears.

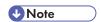
4. After adding all the fonts you want to download, click [OK].

The dialog box of selected fonts to download appears.

5. Click [Download].

The fonts begin to download, and the download status is shown.

- 6. When the completion message appears, click [OK].
- 7. Click [Cancel].



- Some fonts cannot be downloaded.
- Before downloading, read the documentation about the fonts you want to use.

Displaying printer fonts

You can display the available fonts currently downloaded to the printer. Fonts in the printer memory and hard disk drive can be displayed.

1. Select [Display Printer's Fonts...] on the [File] menu.

A dialog box appears.

- 2. Select [Printer's memory] or [Printer's disk].
- Click [OK].



• The fonts displayed in italics are the default fonts.

Deleting fonts

You can delete fonts from the printer's memory or hard disk drive.



- You cannot delete the fonts displayed in italic.
- 1. Select [Display Printer's fonts] on the [File] menu.

A dialog box appears.

- 2. Select [Printer's memory] or [Printer's disk].
- Select the fonts you want to delete.
- 4. Click [Delete].

A confirmation message appears.

- Confirm the fonts you want to delete and the printer name from which you want to delete the fonts.
- 6. Click [Continue], and then click [OK].
- 7. Click [OK].

Initializing the printer disk

When initializing the printer hard disk, all the fonts downloaded to the printer hard disk drive are deleted. Before initializing, be sure to check the fonts on the hard disk drive.

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- When initializing the printer hard disk drive from the control panel, all of the data on the printer hard disk drive is deleted. Before initializing, be sure to check the data on the hard disk drive.
- Do not turn off the power switch until initializing is completed, otherwise the hard disk drive might be damaged.
- 1. Select [Initialize Printer's Disk...] on the [File] menu.

The confirmation message appears. To cancel initialization, click [Cancel].

2. Click [Execute].

Initializing starts.

3. When the completion message appears, click [OK].

Page Setup

You can set the paper size on which to print "Print Fonts Catalogue" and "Prints Fonts Sample".

- 1. Select [Page Setup...] on the [File] menu.
- 2. Select the paper size.
- 3. Click [OK].

Printing font catalog

You can print the names of fonts available on the printer.

1. Select [Print Fonts Catalog...] on the [File] menu.

2. Click [Print].



• The paper selected under [Page Setup] is used.

Printing font sample

You can print samples of fonts downloaded to the hard disk drive or memory.

- 1. Select [Print Fonts Sample...] on the [File] menu.
- 2. Click [Print].



• Print by using the paper selected on [Page Setup].

Renaming the printer

You can change the printer name displayed under Apple Talk. If you connect several printers on the network, assign different names so you can identify them. If several printers have the same name, a digit appears next to the printer name in [Chooser].



- You can enter up to 31 digits and letters.
- Do not use symbols, for example "*", ":", "=", "@", "~".

Mac OS

- 1. On the [File] menu, click [Rename Printer...].
- 2. In the [New Name:] filed enter a new name.
- 3. Click [Rename].

The printer name is changed.

- 4. Click [OK].
- 5. On the Apple menu, click [Chooser].
- 6. Click the [LaserWriter 8] icon.
- 7. Select the printer whose name you changed, and then close the [Chooser] dialog box.
 If there are several Apple Talk zones, select the zone the printer belongs to.

Mac OS X

- 1. On the [File] menu, click [Rename Printer...].
- 2. In the [New Name:] filed enter a new name.

3. Click [Rename].

The printer name is changed.

- 4. Click [OK].
- 5. On the [Printer Utility for Mac] menu, click [Choose Printer...].
- 6. In the [Available Network Zones:] list, select the zone for the Macintosh in use.
- In the [Available Printers:] list, select the printer whose name you changed, and then click [Choose].

Restarting the printer

You can restart the printer.

- 1. Select [Restart Printer] on the [File] menu.
- 2. Confirm the message that appears on the screen, and then click [Restart].

The printer restarts.

The fonts downloaded in the printer memory will be deleted.

If the printer restarts, all the printer settings return to the defaults.

Downloading PS files

You can download a PS file to the printer.

- 1. Select [Download PostScript File...] on the [Utility] menu.
- 2. Select the file name to download, click the file name, and then click [Open].
- 3. Type the log file name, and then click [Save].

The selected file is downloaded.

Errors are recorded in the log file.

Selecting the zone

You can change the zone to which the printer belongs under Apple Talk.

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Confirm that a Macintosh and printer are connected with Apple Talk.

Mac OS

1. On the [Utility] menu, click [Select Zone...].

The zone to which the printer belongs and the available zone list appear.

2. Select the zone in which you want to locate the printer, and then click [Change].

A confirmation message appears.

3. Click [Continue].

A confirmation message appears.

- 4. Click [OK].
- 5. On the Apple menu, click [Chooser].
- 6. Click the [LaserWriter 8] icon.
- 7. In the [AppleTalk zone:] list, select the zone you changed.
- 8. In the [Select a PostScript Printer:] list, select the printer you want to use.
- 9. Close the [Chooser] dialog box.

Mac OS X

1. On the [Utility] menu, click [Select Zone...].

The zone to which the printer belongs and the available zone list appear.

2. Select the zone which you want to locate the printer in, and then click [Change].

A confirmation message appears.

3. Click [Continue].

A confirmation message appears.

- 4. Click [OK].
- 5. On the [Printer Utility for Mac] menu, click [Choose Printer...].
- 6. In the [Available Network Zones:] list, select the zone you changed.
- In the [Available Printers:] list, select the model of printer in use, and then click [Choose].

Displaying the printer status

You can display and confirm the current status of the printer.

1. Select [Display Printer Status...] on the [Utility] menu.

The current status of the printer appears.

2. Confirm the current status of the printer.

You can confirm the memory capacity, the VM (Virtual Memory) space, the hard disk drive status and available space on the hard disk drive. You can also confirm the zone to which the printer belongs.

3. Click [OK].

Launching the dialogue console

You can create and edit a PS file for printing, and then download it to the printer.

Important

- "Launch Dialogue Console" is recommended for users with an understanding of PostScript.
- Do not download any file other than PostScript files to the printer.
- "Launch Dialogue Console" must be used at your own responsibility.
- 1. Select [Launch Dialogue Console...] on the [Utility] menu.

Open the editing screen. The Dialogue Console menu bar appears.

2. Type the PostScript command in the editor screen.

To edit a PostScript file, select [Open] on the [File] menu to open it.

You can search or replace a character string by using the [Search] menu.

3. After editing the PostScript file, select [Download Top Window] on [Console] menu to start printing.

The PostScript file is sent to the printer.

The [Reply from Printer] box opens, depending on the PostScript file you sent.

4. Select [Return To Main Menu] on the [Console] menu to close the PostScript file.

8. Security Measures Provided by this Printer

This chapter describes the security measures provided by this printer and how to use these to use them to control printer usage and improve data security.

Preventing Information Leaks

Guarding Against Unauthorized Copying (Unauthorized Copy Prevention)

Using the printer driver, mask and pattern can be embedded in the printed document.

Guarding Against Unauthorized Copying (Data security for copying)

Using the printer driver with the data security for the copying function, a document can be printed with an embedded pattern of hidden text.

To gray out the copy or stored file of a copy-guarded document when the document is copied or stored, the optional security module is required.

Printing confidential files

Using the printer's Locked Print, files can be stored in the printer as confidential files and then print them. Those file can be printed using the printer's control panel and collected on the spot to prevent others from seeing it.

Managing Log Files

Data security can by improved by deleting log files stored in the printer. By transferring the log files, administrator can check the history data and identify unauthorized access.

To transfer the log data, the log collection server is required.

Overwriting the Data on the Hard Disk

Before disposing of the printer, make sure all data on the hard disk is deleted. Prevent data leakage by automatically deleting transmitted printer jobs from memory.

To overwrite the hard disk data, the optional Data overwrite security unit is required.

Enhanced Network Security

Preventing Unauthorized Access

Limit IP addresses or disable ports to prevent unauthorized access over the network and protect the stored files and default settings.

Encrypting Transmitted Passwords

Prevent login passwords and group passwords for PDF files being revealed by encrypting them for transmission.

Protection Using Encryption

Establish encrypted transmission on this machine using SSL, SNMPv3, and IPsec. By encrypting transmitted data and safeguarding the transmission route, you can prevent sent data from being intercepted, analyzed, and tampered with.

SSL (Secure Sockets Layer) Encryption

This can be specified by the administrator.

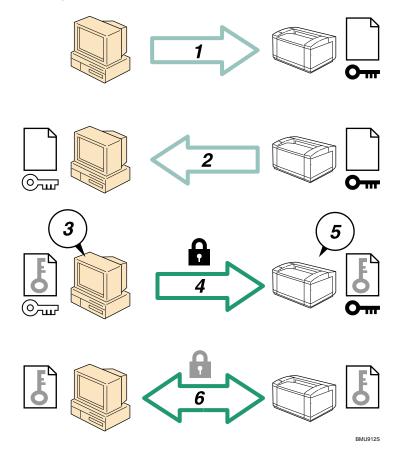
To protect the communication path and establish encrypted communication, create and install the device certificate.

There are two ways of installing a device certificate: create and install a self-signed certificate using the machine, or request a certificate from a certificate authority and install it.

When using SSL, the optional hard disk or the data storage card are required.

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SSL (Secure Sockets Layer)



- 1. To access the machine from a user's computer, request the SSL device certificate and public key.
- 2. The device certificate and public key are sent from the machine to the user's computer.
- 3. Create a shared key from the user's computer, and then encrypt it using the public key.
- 4. The encrypted shared key is sent to the machine.
- 5. The encrypted shared key is decrypted in the machine using the private key.
- 6. Transmit the encrypted data using the shared key, and the data is then decrypted at the machine to attain secure transmission.

Configuration flow (self-signed certificate)

- Creating and installing the device certificate
 Install the device certificate using Web Image Monitor.
- Enabling SSL
 Enable the "SSL/TLS" setting using Web Image Monitor.

Configuration flow (certificate issued by a certificate authority)

1. Creating the device certificate

Create the device certificate using Web Image Monitor.

The application procedure after creating the certificate depends on the certificate authority. Follow the procedure specified by the certificate authority.

2. Installing the device certificate

Install the device certificate using Web Image Monitor.

3. Enabling SSL

Enable the "SSL/TLS" setting using Web Image Monitor.



 To confirm whether SSL configuration is enabled, enter "https://(the machine's IP address or host name)/" in your Web browser's address bar to access this machine. If the "The page cannot be displayed" message appears, check the configuration because the current SSL configuration is invalid.

Creating and Installing the Self-Signed Certificate

Create and install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a self-signed certificate as the device certificate.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

- 4. Click [Configuration], and then click [Device Certificate] under "Security".
- 5. Check the radio button next to the number of the certificate you want to create.
- 6. Click [Create].
- 7. Make the necessary settings.
- 8. Click [OK].

The setting is changed.

9. Click [OK].

A security warning dialog box appears.

"Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

11. Click [Logout].



• Click [Delete] to delete the device certificate from the machine.

Creating the Device Certificate (Certificate Issued by a Certificate Authority)

Create the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

4. Click [Configuration], and then click [Device Certificate] under "Security".

The "Device Certificate" page appears.

- 5. Check the radio button next to the number of the certificate you want to request.
- 6. Click [Request].
- 7. Make the necessary settings.
- 8. Click [OK].

"Requesting" appears under "Certificate Status".

- 9. Click [Logout].
- 10. Apply to the certificate authority for the device certificate.

The application procedure depends on the certificate authority. For details, contact the certificate authority.

For the application, click Web Image Monitor Details icon and use the information that appears in "Certificate Details".

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- The issuing location may not be displayed if you request two certificates at the same time. When you
 install a certificate, be sure to check the certificate destination and installation procedure.
- Using Web Image Monitor, you can create the contents of the device certificate but you cannot send
 the certificate application.
- Click [Cancel Request] to cancel the request for the device certificate.

Installing the Device Certificate (Certificate Issued by a Certificate Authority)

Install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

Enter the device certificate contents issued by the certificate authority.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

4. Click [Configuration], and then click [Device Certificate] under "Security".

The "Device Certificate" page appears.

- 5. Check the radio button next to the number of the certificate you want to install.
- 6. Click [Install].
- 7. Enter the contents of the device certificate.

In the "Certificate Request" box, enter the contents of the device certificate received from the certificate authority.

8. Click [OK].

"Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

9. Click [Logout].

Enabling SSL

After installing the device certificate in the machine, enable the SSL setting.

This procedure is used for a self-signed certificate or a certificate issued by a certificate authority.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

4. Click [Configuration], and then click [SSL/TLS] under "Security".

The "SSL/TLS" page appears.

- 5. Click [Active] for the protocol version used in "SSL/TLS".
- 6. Select the encryption communication mode for "Permit SSL/TLS Communication".
- 7. Click [OK].

The SSL setting is enabled.

- 8. Click [OK].
- 9. Click [Logout].



• If you set "Permit SSL/TLS Communication" to [Ciphertext Only], enter "http://(the machine's IP address or host name)/" to access the machine.

User Settings for SSL (Secure Sockets Layer)

If you have installed a device certificate and enabled SSL (Secure Sockets Layer), you need to install the certificate on the user's computer.

The administrator must explain the procedure for installing the certificate to users.

If a warning dialog box appears while accessing the machine using Web Image Monitor or IPP, start the Certificate Import Wizard and install a certificate.

1. When the Security Alert dialog box appears, click [View Certificate].

The Certificate dialog box appears.

To be able to respond to inquiries from users about such problems as expiry of the certificate, check the contents of the certificate.

2. Click [Install Certificate...] on the "General" tab.

Certificate Import Wizard starts.

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3. Install the certificate by following the Certificate Import Wizard instructions.



- For details about how to install the certificate and about where to store the certificate when accessing the machine using IPP, see Web Image Monitor Help.
- If a certificate issued by a certificate authority is installed in the machine, confirm the certificate store location with the certificate authority.

Setting the SSL / TLS Encryption Mode

By specifying the SSL/TLS encrypted communication mode, you can change the security level.

Encrypted Communication Mode

Using the encrypted communication mode, you can specify encrypted communication.

Ciphertext Only	Allows encrypted communication only. If encryption is not possible, the machine does not communicate.
Ciphertext Priority	Performs encrypted communication if encryption is possible. If encryption is not possible, the machine communicates without it.
Ciphertext/Cleartext	Communicates with or without encryption, according to the setting.

Setting the SSL / TLS encryption mode

This can be specified by the administrator.

After installing the device certificate, specify the SSL/TLS encrypted communication mode. By making this setting, you can change the security level. Specify the SSL/TLS encrypted communication mode using Web Image Monitor.

- 1. Log on to Web Image Monitor in the administrator mode.
- 2. Click [Configuration].
- 3. Click [SSL/TLS] in the "Security" area.
- Select the encryption communication mode in the "Permit SSL/TLS Communication" list, and then click [OK].

Select [Ciphertext Only], [Ciphertext Priority], or [Ciphertext/Cleartext] as the encrypted communication mode.

5. Close Web Image Monitor.



 The SSL/TLS encrypted communication mode can also be specified using Web Image Monitor. For details, see Web Image Monitor Help.

SNMPv3 Encryption

This can be specified by the administrator.

When using SmartDeviceMonitor for Admin or another application to make various settings, you can encrypt the data transmitted.

By making this setting, you can protect data from being tampered with.

- 1. Log on to Web Image Monitor in the administrator mode.
- 2. Click [Configuration].
- 3. Click [Network Security] in the "Security" area.
- 4. Click [Encryption Only] in the "Permit SNMPv3 Communication" area in the "SNMP" area, and then click [OK].
- 5. Close Web Image Monitor.



- To use SmartDeviceMonitor for Admin for encrypting the data for specifying settings, you need to specify the administrator's [Encryption Password] setting and [Encryption Key] in [SNMP Authentication Information] in SmartDeviceMonitor for Admin, in addition to specifying [Permit SNMPv3 Communication] on the machine. For details about specifying [Encryption Key] in SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help.
- If administrator's [Encryption Password] setting is not specified, the data for transmission may not be encrypted or sent.

8

Deleting Data on the Hard Disk

This can be specified by the administrator.

To use this function, the optional Data overwrite security unit must be installed.

The machine's hard disk stores all document data from the printer function. It also stores the data of code counters.

Overwriting Data on the Hard Disk

You can prevent data leakage by automatically overwriting temporarily saved data (Auto Erase Memory) or overwriting all the data stored on the hard disk (Erase All Memory).

For details, see the manual supplied with the Data overwrite security unit.

Auto Erase Memory Setting

To erase data on the hard disk by job type, specify [Memory Erase].

Erase All Memory

To erase all the data on the hard disk at once, specify [Erase All Mem.].

Methods of Erasing the Data

You can select the method of erasing the data from the following:

The default is "NSA".

NSA (National Security Agency)	Overwrites the data on the hard disk twice with random numbers and once with zeros.
DoD (Department of Defense)	Overwrites the data with a number, its complement, and random numbers, and then checks the result.
Random	Overwrites the data with random the specified number of times. You can specify between 1 and 9 as the number of times the data is overwritten with random numbers. The default is 3 times.



- Depending on the amount of data and the erasure method, full erasure might take several hours.
- Once in progress, the Erase All Memory function can be paused, but not stopped. No other operations are possible until all data is erased.
- Even if there is still hold print, stored print, confidential print, or test print data remaining on the hard disk, the "No Remaining Data" overwrite icon will be lit after erasure is completed.

Auto erase memory setting

This can be specified by the administrator.

A print data sent from a printer driver is temporarily stored on the machine's hard disk. Even after the job is completed, it remains in the hard disk as temporary data. Auto Erase Memory erases the temporary data on the hard disk by writing over it.

Overwriting starts automatically once the job is completed.

If a print job is in progress, overwriting will only be done after the job is completed.

Mportant !

- When [Auto Erase] is set to [On], temporary data that remained on the hard disk when [Auto Erase] was set to [Off] might not be overwritten.
- If the main power switch is turned to [Off] before Auto Erase Memory is completed, overwriting will stop and data will be left on the hard disk.
- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- Should the main power switch be turned to [Off] before Auto Erase Memory is completed, overwriting will continue once the main power switch is turned back to [On].
- 1. Press the [Menu] key.
- 2. Press the $[^{\blacktriangle}]$ or $[^{\blacktriangledown}]$ key to display [Maintenance], and then press the $[^{\#}$ Enter] key.
- 3. Press the [▲] or [▼] key to display [Memory Erase], and then press the [♯ Enter] key.
- Press the [▲] or [▼] key to display [Auto Erase], and then press the [# Enter] key.
- 5. Press the [▲] or [▼] key to display [On], and then press the [♯ Enter] key.
- Press the [♠] or [▼] key to display [Erase Method], and then press the [# Enter] key.

Select the method of erasing the data from [NSA], [DoD], or [Random].

If you select [Random], proceed to step 7.

If you select [NSA], proceed to step 9.

If you select [DoD], proceed to step 10.

- 7. Press the [▲] or [▼] key to select [Random], and then press the [# Enter] key.
- 8. Enter the number of times that you want to overwrite using the [♣] or [▼] keys, and then press the [# Enter] key.

Auto Erase Memory is set.

- Press the [▲] or [▼] key to display [NSA], and then press the [# Enter] key.
 Auto Erase Memory is set.
- Press the [▲] or [▼] key to display [DoD], and then press the [# Enter] key.
 Auto Erase Memory is set.





- If an error occurs before overwriting is completed, turn off the main power. Turn it on again, and then repeat from step 2.
- If you specify to both overwrite and encrypt the data, the data will all be encrypted.

Canceling auto erase memory

- 1. Press the [Menu] key.
- 2. Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.
- Press the [▲] or [▼] key to display [Memory Erase], and then press the [# Enter] key.
- 4. Press the [▲] or [▼] key to display [Auto Erase], and then press the [# Enter] key.
- Press the [▲] or [▼] key to display [Off], and then press the [# Enter] key.
 Auto Erase Memory is disabled.

Types of data that can or cannot be overwritten

The following table shows the types of data that can or cannot be overwritten by Auto Erase Memory.

Data overwritten by Auto Erase Memory

Print Jobs

Sample Print / Locked Print / Stored Print Jobs * 1

Spool Printing jobs

Data not overwritten by Auto Erase Memory

Counters stored under each user code

Image overlay data *2

- *1 A Sample Print, Locked Print, or Stored Print job can only be overwritten after printing is completed. Stored print jobs can be overwritten by Auto Erase Memory only if they have been deleted in advance.
- *2 Image overlay data can be overwritten by Auto Erase Memory only if it is deleted in advance.

Erase all memory

This can be specified by the administrator.

You can erase all the data on the hard disk by writing over it. This is useful if you relocate or dispose of your machine.

Mportant !

- If you select "Erase All Mem.", the following are also deleted: user codes, counters under each user
 code, user stamps, printer fonts downloaded by users, applications using Embedded Software
 Architecture, SSL server certificates, and the machine's network settings.
- If the main power switch is turned to [Off] before Auto Erase Memory is completed, overwriting will be stopped and data will be left on the hard disk.
- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- Should the main power switch be turned to [Off] before Auto Erase Memory is completed, overwriting will continue once the main power switch is turned back to [On].
- 1. Disconnect communication cables connected to the printer.
- 2. Press the [Menu] key.
- 3. Press the [▲] or [▼] key to display [Maintenance], and then press the [♯ Enter] key.
- 4. Press the [▲] or [▼] key to display [Erase All Mem.], and then press the [♯ Enter] key.
- 5. Press the [♠] or [♥] key to display [Erase Method], and then press the [♯ Enter] key.
- 6. Select the method of erasing the data.

Select the method of erasing the data from [NSA], [DoD], or [Random].

If you select [Random], proceed to step 7.

If you select [NSA], proceed to step 9.

If you select [DoD], proceed to step 10.

- 7. Press the [♠] or [♥] key to display [Random], and then press the [♯ Enter] key.
- 8. Press the [♠] or [▼] key to enter the number of times that you want to overwrite, and then press the [# Enter] key.
- 9. Press the [▲] or [▼] key to display [NSA], and then press the [# Enter] key.
- 10. Press the [▲] or [▼] key to display [DoD], and then press the [# Enter] key.
- 11. When overwriting is completed, press [# Enter], and then turn off the power.

U Note

- Before erasing the hard disk, you can back up user codes and counters for each user code data using SmartDeviceMonitor for Admin. For details, see SmartDeviceMonitor for Admin Help.
- If an error occurs before overwriting is completed, turn off the main power. Turn it on again, and then repeat from step 2.
- When erasing the entire contents of memory, the erasure can only be paused. No other operations
 can be performed on this machine. The machine takes about one hour and a half to overwrite the
 hard disk three times with random numbers.
- If you specify to both overwrite and encrypt the data, the data will all be encrypted.

Q

D

Pausing erase all memory

- 1. Press [Job Reset] key while Erase All Memory is in progress.
- 2. Press [# Enter] key.

Erase All Memory is canceled.

If you stop this before completion, the data is not fully erased. Execute [Erase All Mem.] again to erase the data.

3. Turn off the main power.



• To resume overwriting after turning the power off, turn the main power back on, and then repeat the procedure in "Erase All Mem.".

Transmission Using IPsec

This can be specified by the administrator.

For communication security, this machine supports IPsec. IPsec transmits secure data packets at the IP protocol level using the shared key encryption method, where both the sender and receiver retain the same key. This machine has two methods that you can use to specify the shared encryption key for both parties: encryption key auto exchange and encryption key manual settings. Using the auto exchange setting, you can renew the shared key exchange settings within a specified validity period, and achieve higher transmission security.

☆ Important

- When "Inactive" is specified for "Exclude HTTPS Transmission", access to Web Image Monitor can be lost if the key settings are improperly configured. In order to prevent this, you can specify IPsec to exclude HTTPS transmission by selecting "Active". When you want to include HTTPS transmission, we recommend that you select "Inactive" for "Exclude HTTPS Transmission" after confirming that IPsec is properly configured. When "Active" is selected for "Exclude HTTPS Transmission", even though HTTPS transmission is not targeted by IPsec, Web Image Monitor might become unusable when TCP is targeted by IPsec from the computer side. If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec on the control panel, and then access Web Image Monitor. For details about disabling IPsec using the control panel, see "Deactivating IPsec Using the Control Panel".
- IPsec is not applied to data obtained through DHCP, DNS, or WINS.
- IPsec compatible operating systems are Windows XP SP2, Windows Vista, Mac OSX 10.4 and later, RedHat Linux Enterprise WS 4.0, and Solaris 10. However, some setting items are not supported depending on the operating system. Make sure the IPsec settings you specify are consistent with the operating system's IPsec settings.

Reference

• p.372 " Deactivating IPsec Using the Control Panel"

Encryption and Authentication by IPsec

IPsec consists of two main functions: the encryption function, which ensures the confidentiality of data, and the authentication function, which verifies the sender of the data and the data's integrity. This machine's IPsec function supports two security protocols: the ESP protocol, which enables both of the IPsec functions at the same time, and the AH protocol, which enables only the authentication function.

ESP Protocol

Performs secure transmission through both encryption and authentication.

- For successful encryption, both the sender and receiver must specify the same encryption
 algorithm and encryption key. If you use the encryption key auto exchange method, the
 encryption algorithm and encryption key are specified automatically.
- For successful authentication, the sender and receiver must specify the same authentication
 algorithm and authentication key. If you use the encryption key auto exchange method, the
 authentication algorithm and authentication key are specified automatically.

AH Protocol

Performs secure transmission using authentication only.

For successful authentication, the sender and receiver must specify the same authentication
algorithm and authentication key. If you use the encryption key auto exchange method, the
authentication algorithm and authentication key are specified automatically.



• Some operating systems use the term "Compliance" in place of "Authentication".

Encryption Key Auto Exchange Settings and Encryption Key Manual Settings

This machine provides two key setting methods: manual and auto exchange. Using either of these methods, agreements such as the IPsec algorithm and key must be specified for both sender and receiver. Such agreements form what is known as an SA (Security Association). IPsec communication is possible only if the receiver's and sender's SA settings are identical.

If you use the auto exchange method to specify the encryption key, the SA settings are auto configured on both parties' machines. However, before setting the IPsec SA, the ISAKMPSA (Phase 1) settings are auto configured. After this, the IPsec SA (Phase 2) settings, which allow actual IPsec transmission, are auto configured.

Also, for further security, the SA can be periodically auto updated by applying a validity period (time limit) for its settings. This machine only supports IKEv1 for encryption key auto exchange.

If you specify the encryption key manually, the SA settings must be shared and specified identically by both parties. To preserve the security of your SA settings, we recommend that they are not exchanged over a network.

Note that for both the manual and auto method of encryption key specification, multiple settings can be configured in the SA.

Settings 1-4 and Default Setting

Using either the manual or auto exchange method, you can configure four separate sets of SA details (such as different shared keys and IPsec algorithms). In the default settings of these sets, you can include settings that the fields of sets 1 to 4 cannot contain.

When IPsec is enabled, set 1 has the highest priority and 4 has the lowest. You can use this priority system to target IP addresses more securely. For example, set the broadest IP range at the lowest

priority (4), and then set specific IP addresses at a higher priority level (3 and higher). This way, when IPsec transmission is enabled for a specific IP address, the higher level security settings will be applied.

IPsec Settings

IPsec settings for this machine can be made on Web Image Monitor. The following table explains individual setting items.

Encryption Key Auto Exchange / Manual Settings - Shared Settings

Setting	Description	Setting Value
IPsec	Specify whether to enable or disable IPsec.	Active Inactive
Exclude HTTPS Transmission	Specify whether to enable IPsec for HTTPS transmission.	 Active Inactive Specify "Active" if you do not want to use IPsec for HTTPS transmission.
Encryption Key Manual Settings	Specify whether to enable Encryption Key Manual Settings, or use Encryption Key Auto Exchange Settings only.	Active Inactive Specify "Active" if you want to use "Encryption Key Manual Exchange Settings".

Encryption Key Auto Exchange Security Level

When you select a security level, certain security settings are automatically configured. The following table explains security level features.

Security Level	Security Level Features
Authentication Only	Select this level if you want to authenticate the transmission partner and prevent unauthorized data tampering, but not perform data packet encryption. Since the data is sent in cleartext, data packets are vulnerable to eavesdropping attacks. Do not select this if you are exchanging sensitive information.
Authentication and Low Level Encryption	Select this level if you want to encrypt the data packets as well as authenticate the transmission partner and prevent unauthorized

Security Level	Security Level Features
	packet tampering. Packet encryption helps prevent eavesdropping attacks. This level provides less security than "Authentication and High Level Encryption".
Authentication and High Level Encryption	Select this level if you want to encrypt the data packets as well as authenticate the transmission partner and prevent unauthorized packet tampering. Packet encryption helps prevent eavesdropping attacks. This level provides higher security than "Authentication and Low Level Encryption".

The following table lists the settings that are automatically configured according to the security level.

Setting	Authentication Only	Authentication and Low Level Encryption	Authentication and High Level Encryption
Security Policy	Apply	Apply	Apply
Encapsul ation Mode	Transport	Transport	Transport
IPsec Requirem ent Level	Use When Possible	Use When Possible	Always Require
Authentic ation Method	PSK	PSK	PSK
Phase 1 Hash Algorithm	MD5	SHA1	SHA1
Phase 1 Encryptio n Algorithm	DES	3DES	3DES
Phase 1 Diffie- Hellman Group	2	2	2

Setting	Authentication Only	Authentication and Low Level Encryption	Authentication and High Level Encryption
Phase 2 Security Protocol	АН	ESP	ESP
Phase 2 Authentic ation Algorithm	HMAC-MD5-96/ HMAC-SHA1-96	HMAC-MD5-96/HMAC- SHA1-96	HMAC-SHA1-96
Phase 2 Encryptio n Algorithm	Cleartext (NULL encryption)	DES/3DES/AES-128/ AES-192/AES-256	3DES/AES-128/ AES-192/AES-256
Phase 2 PFS	Inactive	Inactive	2

Encryption Key Auto Exchange Setting Items

When you specify a security level, the corresponding security settings are automatically configured, but other settings, such as address type, local address, and remote address must still be configured manually.

After you specify a security level, you can still make changes to the auto configured settings. When you change an auto configured setting, the security level switches automatically to "User Setting".

Setting	Description	Setting Value
Address Type	Specify the address type for which IPsec transmission is used.	 Inactive IPv4 IPv6 IPv4/IPv6 (Default Settings only)
Local Address	Specify the machine's address. If you are using multiple addresses in IPv6, you can also specify an address range.	The machine's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.

Setting	Description	Setting Value
Remote Address	Specify the address of the IPsec transmission partner. You can also specify an address range.	The IPsec transmission partner's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Encapsulation Mode	Specify the encapsulation mode. (auto setting)	• Transport • Tunnel (Tunnel beginning address - Tunnel ending address) If you specify "Tunnel", you must then specify the "Tunnel End Points", which are the beginning and ending IP addresses. Set the same address for the beginning point as you set in "Local Address".
IPsec Requirement Level	Specify whether to only transmit using IPsec, or to allow cleartext transmission when IPsec cannot be established. (auto setting)	 Use When Possible Always Require
Authentication Method	Specify the method for authenticating transmission partners. (auto setting)	PSK Certificate If you specify PSK, you must then set the PSK text (using ASCII characters). If you specify Certificate, the certificate for IPsec must be installed and specified before it can be used.
Phase 1 HASH Algorithm	Specify the HASH algorithm to be used in phase 1. (auto setting)	• MD5 • SHA1

Setting	Description	Setting Value
Phase 1 Encryption Algorithm	Specify the encryption algorithm to be used in phase 1. (auto setting)	• DES • 3DES
Phase 1 Diffie-Hellman Group	Specify the Diffie-Hellman group number. (auto setting)	• 1
Phase 1 Validity Period	Specify the time period for which the SA settings in phase 1 are valid.	Set in seconds from 300 sec. (5 min.) to 172800 sec. (48 hrs.).
Phase 2 Security Protocol	Specify the security protocol to be used in Phase 2. (auto setting)	 ESP AH ESP+AH
Phase 2 Authentication Algorithm	Specify the authentication algorithm to be used in phase 2. (auto setting)	 HMAC-MD5-96 HMAC-SHA1-96
Phase 2 Encryption Algorithm Permissions	Specify the encryption algorithm to be used in phase 2. (auto setting)	 Cleartext (NULL encryption) DES 3DES AES-128 AES-192 AES-256
Phase 2 PFS	Specify whether to activate PFS. Then, if PFS is activated, select the Diffie-Hellman group. (auto setting)	Inactive1214
Phase 2 Validity Period	Specify the time period for which the SA settings in phase 2 are valid.	Specify a period (in seconds) from 300 (5min.) to 172800 (48 hrs.).

Encryption Key Manual Settings Items

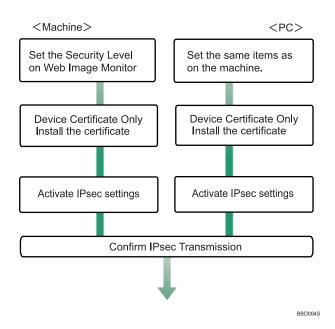
Setting	Description	Setting Value
Address Type	Specify the address type for which IPsec transmission is used.	 Inactive IPv4 IPv6 IPv4/IPv6 (Default Settings only)
Local Address	Specify the machine's address. If you are using multiple IPv6 addresses, you can also specify an address range.	The machine's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Remote Address	Specify the address of the IPsec transmission partner. You can also specify an address range.	The IPsec transmission partner's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Encapsulation Mode	Select the encapsulation mode.	• Transport • Tunnel (Tunnel beginning address - Tunnel ending address) If you select "Tunnel", set the "Tunnel End Point", the beginning and ending IP addresses. In "Tunnel End Point", set the same address for the beginning point as you set in "Local Address".
SPI (Output)	Specify the same value as your transmission partner's SPI input value.	Any number between 256 and 4095

Setting	Description	Setting Value
SPI (Input)	Specify the same value as your transmission partner's SPI output value.	Any number between 256 and 4095
Security Protocol	To use encryption and authentication data, specify EPS. To use authentication data only, specify AH.	• EPS • AH
Authentication Algorithm	Specify the authentication algorithm.	HMAC-MD5-96HMAC-SHA1-96
Authentication Key	Specify the key for the authentication algorithm.	Specify a value within the ranges shown below, according to the encryption algorithm. hexadecimal value 0-9, a-f, A-F • If HMAC-MD5-96, set 32 digits • If HMAC-SHA1-96, set 40 digits ASCII • IF HMAC-MD5-96, set 16 characters • If HMAC-SHA1-96, set 20 characters
Encryption Algorithm	Specify the encryption algorithm.	 Cleartext (NULL encryption) DES 3DES AES-128 AES-192 AES-256

Setting	Description	Setting Value
Encryption Key	Specify the key for the encryption algorithm.	Specify a value within the ranges shown below, according to the encryption algorithm. hexadecimal value 0-9, a-f, A-F • DES, set 16 digits • 3DES, set 48 digits • AES-128, set 32 digits • AES-192, set 48 digits • AES-256, set 64 digits ASCII • DES, set 8 characters • 3DES, set 24 characters • AES-128, set 16 characters • AES-192, set 24 characters • AES-192, set 24 characters • AES-192, set 32 characters

Encryption Key Auto Exchange Settings Configuration Flow

This section explains the procedure for specifying Encryption Key Auto Exchange Settings. This can be specified by the administrator.





- To use a certificate to authenticate the transmission partner in encryption key auto exchange settings, a device certificate must be installed.
- After configuring IPsec, you can use "Ping" command to check if the connection is established correctly.
 However, you cannot use "Ping" command when ICMP is excluded from IPsec transmission on the computer side. Also, because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.

Specifying encryption key auto exchange settings

This can be specified using Web Image Monitor.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

4. Click [Configuration], and then click [IPsec] under "Security".

The IPsec settings page appears.

- 5. Click [Edit] under "Encryption Key Auto Exchange Settings".
- 6. Make encryption key auto exchange settings in [Settings 1].

If you want to make multiple settings, select the settings number and add settings.

- 7. Click [OK].
- 8. Select [Active] for "IPsec".
- Set "Exclude HTTPS Communication" to [Active] if you do not want to use IPsec for HTTPS communication.
- 10. Click [OK].
- 11. Click [Logout].



• To change the transmission partner authentication method for encryption key auto exchange settings to "Certificate", you must first install and assign a certificate.

Selecting the certificate for IPsec

This can be specified by the administrator.

Using Web Image Monitor, select the certificate to be used for IPsec. You must install the certificate before it can be used.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

4. Click [Configuration], and then click [Device Certificate] under "Security".

The "Device Certificate" settings page appears.

- Select the certificate to be used for IPsec from the drop down box in "IPsec" under "Certificate".
- 6. Click [OK].

The certificate for IPsec is specified.

- 7. Click [OK].
- 8. Click [Logout].

Specifying IPsec settings on the computer

Specify exactly the same settings for IPsec SA settings on your computer as are specified by the machine's security level on the machine. Setting methods differ according to the computer's operating system. The example procedure shown here uses Windows XP when the Authentication and Low Level Encryption Security level is selected.

- On the [Start] menu, click [Control Panel], click [Performance and Maintenance], and then click [Administrative Tools].
- 2. Click [Local Security Policy].
- 3. Click [IP Security Policies on Local Computer].
- In the "Action" menu, click [Create IP Security Policy].
 The IP Security Policy Wizard appears.
- 5. Click [Next].
- 6. Enter a security policy name in "Name", and then click [Next].
- Clear the "Activate the default response rule" check box, and then click [Next].
- 8. Select "Edit properties", and then click [Finish].
- 9. In the "General" tab, click [Advanced].
- 10. In "Authenticate and generate a new key after every" enter the same validity period (in minutes) that is specified on the machine in Encryption Key Auto Exchange Settings Phase 1, and then click [Methods].
- 11. Confirm that the combination of hash algorithm (on Windows XP, "Integrity"), the encryption algorithm (on Windows XP, "Encryption"), and the Diffie-Hellman group settings in "Security method preference order" match the settings specified on the machine in Encryption Key Auto Exchange Settings Phase 1.
- 12. If the settings are not displayed, click [Add].
- 13. Click [OK] twice.
- 14. Click [Add] in the "Rules" Tab.

The Security Rule Wizard appears.

- 15. Click [Next].
- 16. Select "This rule does not specify a tunnel", and then click [Next].
- 17. Select the type of network for IPsec, and then click [Next].
- 18. Select the "initial authentication method", and then click [Next].
- 19. If you select "Certificate" for authentication method in Encryption Key Auto Exchange Settings on the machine, specify the device certificate. If you select PSK, enter the same PSK text specified on the machine with the pre-shared key.
- 20. Click [Add] in the IP Filter List.

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- 21. In [Name], enter an IP Filter name, and then click [Add].
 - The IP Filter Wizard appears.
- 22. Click [Next].
- 23. Select "My Address" in "Source Address", and then click [Next].
- 24. Select "A specific IP address" in "Destination Address", enter the machine's IP address, and then click [Next].
- 25. Select the protocol type for IPsec, and then click [Next].
- 26. Click [Finish].
- 27. Click [OK].
- 28. Select the IP filter that was just created, and then click [Next].
- 29. Select the IPsec security filter, and then click [Edit].
- 30. Click [Add], select the "Custom" check box, and then click [Settings].
- 31. In "Integrity algorithm", select the authentication algorithm that was specified on the machine in Encryption Key Auto Exchange Settings Phase 2.
- 32. In "Encryption algorithm", select the encryption algorithm that specified on the machine in Encryption Key Auto Exchange Settings Phase 2.
- 33. In Session Key settings, select "Generate a new key every", and enter the validity period (in seconds) that was specified on the machine in Encryption Key Auto Exchange Settings Phase 2.
- 34. Click [OK] three times.
- 35. Click [Next].
- 36. Click [Finish].
- 37. Click [OK].
- 38. Click [Close].

The new IP security policy (IPsec settings) is specified.

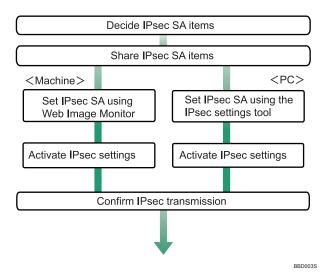
39. Select the security policy that was just created, right click, and then click [Assign].
IPsec settings on the computer are enabled.



- To disable the computer's IPsec settings, select the security policy, right click, and then click [Unassign].
- If you specify the "Authentication and High Level Encryption" security level in encryption key auto
 exchange settings, also select the "Master key perfect forward secrecy (PFS)" check box in the Security
 Filter Properties screen (which appears in step 29). If using PFS in Windows XP, the PFS group number
 used in phase 2 is automatically negotiated in phase 1 from the Diffie-Hellman group number (set in
 step 11). Consequently, if you change the security level specified automatic settings on the machine

Encryption Key Manual Settings Configuration Flow

This section explains the procedure for specifying encryption key manual settings. This can be specified by the administrator.





- Before transmission, SA information is shared and specified by the sender and receiver. To prevent SA information leakage, we recommend that this exchange is not performed over the network.
- After configuring IPsec, you can use "Ping" command to check if the connection is established correctly.
 However, you cannot use "Ping" command when ICMP is excluded from IPsec transmission. Also, because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.

Specifying encryption key manual settings

This can be specified using Web Image Monitor.

- 1. Open a Web browser.
- 2. Enter "http://(the machine's IP address or host name)/" in the address bar.

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

The top page of Web Image Monitor appears.

3. Click [Login].

The administrator can log on.

Enter the login user name and login password.

4. Click [Configuration], and then click [IPsec] under "Security".

The IPsec settings page appears.

- 5. Select [Active] for "Encryption Key Manual Settings".
- 6. Click [Edit] under "Encryption Key Manual Settings".
- 7. Set items for encryption key manual settings in [Settings 1].

If you want to make multiple settings, select the settings number and add settings.

- 8. Click [OK].
- 9. Select [Active] for "IPsec:" in "IPsec".
- Set "Exclude HTTPS Communication" to [Active] if you do not want to use IPsec for HTTPS
 communication.
- 11. Click [OK].
- 12. Click [Logout].

telnet Setting Commands

You can use telnet to confirm IPsec settings and make setting changes. This section explains telnet commands for IPsec. To log in as an administrator using telnet, the default login user name is "admin", and leave the password blank. For details about logging in to telnet and telnet operations, see "Remote Maintenance by telnet", Software Guide.



 If you are using a certificate as the authentication method in encryption key auto exchange settings (IKE), install the certificate using Web Image Monitor. A certificate cannot be installed using telnet.

ipsec

To display IPsec related settings information, use the "ipsec" command.

Display current settings

msh> ipsec

Displays the following IPsec settings information:

- IPsec shared settings values
- Encryption key manual settings, SA setting 1-4 values

- Encryption key manual settings, default setting values
- Encryption key auto exchange settings, IKE setting 1-4 values
- Encryption key auto exchange settings, IKE default setting values

Display current settings portions

```
msh> ipsec -p
```

• Displays IPsec settings information in portions.

ipsec manual mode

To display or specify encryption key manual settings, use the "ipsec manual_mode" command.

Display current settings

```
msh> ipsec manual_mode
```

• Displays the current encryption key manual settings.

Specify encryption key manual settings

```
msh> ipsec manual_mode {on|off}
```

• To enable encryption key manual settings, set to [on]. To disable settings, set to [off].

ipsec exclude

To display or specify protocols excluded by IPsec, use the "ipsec exclude" command.

Display current settings

```
msh> ipsec exclude
```

• Displays the protocols currently excluded from IPsec transmission.

Specify protocols to exclude

```
msh> ipsec exclude {https|dns|dhcp|wins|all} {on|off}
```

• Specify the protocol, and then enter [on] to exclude it, or [off] to include it for IPsec transmission. Entering [all] specifies all protocols collectively.

ipsec manual

To display or specify the encryption key manual settings, use the "ipsec manual" command.

Display current settings

```
msh> ipsec manual {1|2|3|4|default}
```

- To display the settings 1-4, specify the number [1-4].
- To display the default setting, specify [default].
- Not specifying any value displays all of the settings.

Q

Disable settings

msh> ipsec manual {1|2|3|4|default} disable

- To disable the settings 1-4, specify the setting number [1-4].
- To disable the default settings, specify [default].

Specify the local/remote address for settings 1-4

msh> ipsec manual {1|2|3|4} {ipv4|ipv6} local address remote address

- Enter the separate setting number [1-4] or [default] and specify the local address and remote
 address.
- To specify the local or remote address value, specify masklen by entering [/] and an integer
 0-32 if you are specifying an IPv4 address. If you are specifying an IPv6 address, specify masklen
 by entering [/] and an integer 0-128.
- Not specifying an address value displays the current setting.

Specify the address type in default setting

msh> ipsec manual default {ipv4|ipv6|any}

- Specify the address type for the default setting.
- To specify both IPv4 and IPv6, enter [any].

Security protocol setting

msh> ipsec manual {1|2|3|4|default} proto {ah|esp|dual}

- Enter the separate setting number [1-4] or [default] and specify the security protocol.
- To specify AH, enter [ah]. To specify ESP, enter [esp]. To specify AH and ESP, enter [dual].
- Not specifying a protocol displays the current setting.

SPI value setting

msh> ipsec manual {1|2|3|4|default} spi SPI input value SPI output value

- Enter the separate setting number [1-4] or [default] and specify the SPI input and output values.
- Specify a decimal number between 256-4095, for both the SPI input and output values.

Encapsulation mode setting

msh> ipsec manual {1|2|3|4|default} mode {transport|tunnel}

- Enter the separate setting number [1-4] or [default] and specify the encapsulation mode.
- To specify transport mode, enter [transport]. To specify tunnel mode, enter [tunnel].
- If you have set the address type in the default setting to [any], you cannot use [tunnel] in encapsulation mode.
- Not specifying an encapsulation mode displays the current setting.

9

Tunnel end point setting

msh> ipsec manual $\{1|2|3|4| default\}$ tunneladdar beginning IP address ending IP address

- Enter the separate setting number [1-4] or [default] and specify the tunnel end point beginning and ending IP address.
- Not specifying either the beginning or ending address displays the current settings.

Authentication algorithm and authentication key settings

msh> ipsec manual {1|2|3|4|default} auth {hmac-md5|hmac-sha1} authentication key

- Enter the separate setting number [1-4] or [default] and specify the authentication algorithm, and then set the authentication key.
- If you are setting a hexadecimal number, attach 0x at the beginning.
- If you are setting an ASCII character string, enter it as is.
- Not specifying either the authentication algorithm or key displays the current setting. (The authentication key is not displayed.)

Encryption algorithm and encryption key setting

msh> ipsec manual $\{1|2|3|4| \text{default}\}\$ encrypt $\{\text{null}|\text{des}|3\text{des}|\text{aes}128|\text{aes}192|\text{aes}256}\}\$ encryption key

- Enter the separate setting number [1-4] or [default], specify the encryption algorithm, and then set the encryption key.
- If you are setting a hexadecimal number, attach 0x at the beginning. If you have set the encryption algorithm to [null], enter an encryption key of arbitrary numbers 2-64 digits long.
- If you are setting an ASCII character string, enter it as is. If you have set the encryption algorithm to [null], enter an encryption key of arbitrary numbers 1-32 digits long.
- Not specifying an encryption algorithm or key displays the current setting. (The encryption key is not displayed.)

Reset setting values

msh> ipsec manual {1|2|3|4|default|all} clear

• Enter the separate setting number [1-4] or [default] and reset the specified setting. Specifying [all] resets all of the settings, including default.

ipsec ike

To display or specify the encryption key auto exchange settings, use the "ipsec ike" command.

Display current settings

msh> ipsec ike {1|2|3|4|default}

• To display the settings 1-4, specify the number [1-4].

- To display the default setting, specify [default].
- Not specifying any value displays all of the settings.

Disable settings

msh> ipsec manual {1|2|3|4|default} disable

- To disable the settings 1-4, specify the number [1-4].
- To disable the default settings, specify [default].

Specify the local/remote address for settings 1-4

msh> ipsec manual {1|2|3|4} {ipv4|ipv6} local address remote address

- Enter the separate setting number [1-4], and the address type to specify local and remote address.
- To set the local or remote address values, specify masklen by entering [/] and an integer 0-32 when settings an IPv4 address. When setting an IPv6 address, specify masklen by entering [/] and an integer 0-128.
- Not specifying an address value displays the current setting.

Specify the address type in default setting

msh> ipsec manual default {ipv4|ipv6|any}

- · Specify the address type for the default setting.
- To specify both ipv4 and ipv6, enter [any].

Security policy setting

msh> ipsec ike {1|2|3|4|default} proc {apply|bypass|discard}

- Enter the separate setting number [1-4] or [default] and specify the security policy for the address specified in the selected setting.
- To apply IPsec to the relevant packets, specify [apply]. To not apply IPsec, specify [bypass].
- If you specify [discard], any packets that IPsec can be applied to are discarded.
- Not specifying a security policy displays the current setting.

Security protocol setting

msh> ipsec ike {1|2|3|4|default} proto {ah|esp|dual}

- Enter the separate setting number [1-4] or [default] and specify the security protocol.
- To specify AH, enter [ah]. To specify ESP, enter [esp]. To specify AH and ESP, enter [dual].
- Not specifying a protocol displays the current setting.

IPsec requirement level setting

msh> ipsec ike {1|2|3|4|default} level {require|use}

• Enter the separate setting number [1-4] or [default] and specify the IPsec requirement level.

- If you specify [require], data will not be transmitted when IPsec cannot be used. If you specify
 [use], data will be sent normally when IPsec cannot be used. When IPsec can be used, IPsec
 transmission is performed.
- Not specifying a requirement level displays the current setting.

Encapsulation mode setting

msh> ipsec ike {1|2|3|4|default} mode {transport|tunnel}

- Enter the separate setting number [1-4] or [default] and specify the encapsulation mode.
- To specify transport mode, enter [transport]. To specify tunnel mode, enter [tunnel].
- If you have set the address type in the default setting to [any], you cannot use [tunnel] in encapsulation mode.
- Not specifying an encapsulation mode displays the current setting.

Tunnel end point setting

msh \rangle ipsec ike $\{1|2|3|4|$ default $\}$ tunneladdar beginning IP address ending IP address

- Enter the separate setting number [1-4] or [default] and specify the tunnel end point beginning and ending IP address.
- Not specifying either the beginning or ending address displays the current setting.

IKE partner authentication method setting

msh> ipsec ike {1|2|3|4|default} auth {psk|rsasig}

- Enter the separate setting number [1-4] or [default] and specify the authentication method.
- Specify [psk] to use a shared key as the authentication method. Specify [rsasig] to use a certificate
 at the authentication method.
- You must also specify the PSK character string when you select [psk].
- Note that if you select "Certificate", the certificate for IPsec must be installed and specified before
 it can be used. To install and specify the certificate use Web Image Monitor.

PSK character string setting

msh> ipsec ike {1|2|3|4|default} psk PSK character string

- If you select PSK as the authentication method, enter the separate setting number [1-4] or [default] and specify the PSK character string.
- Specify the character string in ASCII characters. There can be no abbreviations.

ISAKMP SA (phase 1) hash algorithm setting

msh> ipsec ike {1|2|3|4|default} ph1 hash {md5|sha1}

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) hash algorithm.
- To use MD5, enter [md5]. To use SHA1, enter [sha1].

Q

· Not specifying the hash algorithm displays the current setting.

ISAKMP SA (phase 1) encryption algorithm setting

msh> ipsec ike {1|2|3|4|default} ph1 encrypt {des|3des}

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) encryption algorithm.
- To use DES, enter [des]. To use 3DES, enter [3des].
- Not specifying an encryption algorithm displays the current setting.

ISAKMP SA (phase 1) Diffie-Hellman group setting

msh \rangle ipsec ike {1|2|3|4|default} ph1 dhgroup {1|2|14}

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) Diffie-Hellman group number.
- Specify the group number to be used.
- Not specifying a group number displays the current setting.

ISAKMP SA (phase 1) validity period setting

msh> ipsec ike {1|2|3|4|default} ph1 lifetime validity period

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) validity period.
- Enter the validity period (in seconds) from 300 to 172800.
- Not specifying a validity period displays the current setting.

IPsec SA (phase 2) authentication algorithm setting

msh> ipsec ike {1|2|3|4|default} ph2 auth {hmac-md5|hmac-sha1}

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) authentication algorithm.
- Separate multiple encryption algorithm entries with a comma (,). The current setting values are displayed in order of highest priority.
- · Not specifying an authentication algorithm displays the current setting.

IPsec SA (phase 2) encryption algorithm setting

msh> ipsec ike $\{1|2|3|4|default\}$ ph2 encrypt $\{null|des|3des|aes128|aes192|aes256\}$

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) encryption algorithm.
- Separate multiple encryption algorithm entries with a comma (,). The current setting values are displayed in order of highest priority.
- Not specifying an encryption algorithm displays the current setting.

IPsec SA (phase 2) PFS setting

msh \rangle ipsec ike {1|2|3|4|default} ph2 pfs {none|1|2|14}

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) Diffie-Hellman group number.
- Specify the group number to be used.
- Not specifying a group number displays the current setting.

IPsec SA (phase 2) validity period setting

msh> ipsec ike {1|2|3|4|default} ph2 lifetime validity period

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) validity period.
- Enter the validity period (in seconds) from 300 to 172800.
- Not specifying a validity period displays the current setting.

Reset setting values

msh> ipsec ike {1|2|3|4|default|all} clear

• Enter the separate setting number [1-4] or [default] and reset the specified setting. Specifying [all] resets all of the settings, including default.

Deactivating IPsec Using the Control Panel

- 1. Press the [Menu] key.
- 2. Press the [♠] or [♥] key to display [Host Interface], and then press the [# Enter] key.
- 3. Press the [♠] or [♥] key to display [Network Setup], and then press the [♯ Enter] key.
- Press the [▲] or [▼] key to display [IPsec], and then press the [# Enter] key.
- Press the [▲] or [▼] key to display [Not Active], and then press the [# Enter] key.
 IPsec is now deactivated.

Software and Utilities Included on the CD-ROM

This section explains the software and utilities included on the "Printer Drivers and Utilities" CD-ROM that comes with this printer.

Font Manager

For installing new screen fonts, or organizing and managing fonts already in the system. For details about Font Manager, see the manual on the CD-ROM labeled "Printer Drivers and Utilities".

SmartDeviceMonitor for Admin

For the administrator to manage network printers.

DeskTopBinder - SmartDeviceMonitor for Client

For users to manage their network print status.

Printer Utility for Mac

This utility allows users to download and manage a variety of fonts as well as manage printers. For details about this utility, see "Printer Utility for Mac".



- Some documentation about using the machine is included on the CD-ROM in PDF format. For details
 about using Adobe Acrobat Reader/Adobe Reader, see Adobe Acrobat Reader/Adobe Reader
 online Help.
- For details, see "Printer Utility for Mac".

Reference

• p.327 "Printer Utility for Mac"

Viewing the Contents of the CD-ROM

This section explains how to view the contents of the CD-ROM.

1. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

2. Click [Browse This CD-ROM].

Explorer starts and displays the contents of the CD-ROM.

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This section explains printer drivers for this printer.

You can install the PCL printer drivers (PCL 5e and PCL 6), the RPCS printer driver, and the PostScript printer drivers from the CD-ROM provided with this machine or download them from the supplier's Web site. If your operating system is Windows XP x64/Vista x64, Windows Server 2003/2003 R2/2008 x64, you must download the printer drivers from the supplier's Web site. Select this machine and the operating system you are using, and then download them.

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM labeled "Printer Drivers and Utilities".

Printer Language	PCL 6	PCL 5e	RPCS	PostScript 3
Windows 2000 * 1	ОК	OK	OK	OK
Windows XP *2	ОК	OK	OK	ОК
Windows Vista *3	ОК	OK	OK	OK
Windows Server 2003 *4	ОК	OK	OK	OK
Windows Server 2008 *5	OK	OK	OK	OK
Mac OS *6	_	_	_	OK
Mac OS X *7	_	_	_	OK

- * 1 Microsoft Windows 2000 Professional / Microsoft Windows 2000 Server/Microsoft Windows 2000 Advanced Server
- *2 Microsoft Windows XP Professional/Microsoft Windows XP Home Edition
- *3 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/ Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic
- *4 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/Microsoft Windows Server 2003 Web Edition/Microsoft Windows Server 2003 Datacenter Edition/Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise Edition/Microsoft Windows Server 2003 R2 Datacenter Edition
- *5 Microsoft Windows Server 2008 Standard Edition/Microsoft Windows Server 2008 Enterprise Edition/ Microsoft Windows Server 2008 Datacenter Edition
- *6 Versions 8.6 to 9.2 of the Mac OS (Mac OS X Classic mode is supported.)
- *7 Mac OS X 10.1 or later (Native mode)

PCL printer drivers

Two kinds of PCL printer driver (PCL 5e and PCL 6) are included. These drivers allow your computer to communicate with this machine via a printer language. To use these drivers, the Printer Enhance Option is required.

RPCS printer driver

This printer driver allows the computer to communicate with the printer using a printer language. In addition to the conventional user interface, another preset user interface is provided. In addition to the conventional user interface, another preset user interface is provided.

PostScript Printer Drivers and PPD files

PostScript printer drivers allow the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions.

PPD files

PPD files allow the printer driver to enable specific printer functions.



- Some applications may require installation of the PCL 5e printer driver. In this case, you can install PCL 5e without having to install PCL 6.
- For details, see "Installing the Printer Driver".



• p.20 "Installing the Printer Driver"

SmartDeviceMonitor for Admin

This section describes the file path and available functions of SmartDeviceMonitor for Admin.

SmartDeviceMonitor for Admin is an application that uses TCP/IP and IPX/SPX to monitor network printers. It can monitor multiple network printers using IP address. We recommend that administrators use this application.

File path

SmartDeviceMonitor for Admin is stored in the following folder in the CD-ROM:

\NETWORK\DEVMON\ADMIN\DISK1

Operating system	Protocol stack
Windows 2000	TCP/IP provided with Windows 2000
	IPX/SPX provided with Windows 2000
	NetWare Client provided with Windows 2000
	Novell Client provided with Windows 2000

Available functions

SmartDeviceMonitor for Admin has the following functions to check the followings:

- Printer supplies such as paper or toner
- · Results of print jobs executed from the computer



 For information about using SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help.

DeskTopBinder - SmartDeviceMonitor for Client

This section describes the file path and system requirements of DeskTopBinder-SmartDeviceMonitor for Client.

SmartDeviceMonitor for Client has the following functions. We recommend that users install this application.

- Printing in a peer-to-peer network, using TCP/IP, and IPP from Windows 2000/XP/Vista or Windows Server 2003/2003 R2/2008.
- Constantly monitoring the status of devices on the network using TCP/IP and IPX/SPX.

Mportant !

- To perform Recovery or Parallel printing, the same options that are installed on the original printer
 must be installed on the other printers also. Printers that lack a required option cannot be used for
 Recovery or Parallel printing.
- To perform Recovery or Parallel printing, the same paper loaded in the original printer must be loaded
 in the other printers also. Load all printers with the same paper as that loaded in the tray selected for
 printing.
- Results of Recovery or Parallel Printing might differ, depending on the model of the other printer and the options installed on it.
- If you select Sample Print or Locked Print, you cannot select Recovery Printing or Parallel Printing.

File path

SmartDeviceMonitor for Client is stored in the following folder on the CD-ROM.

NETWORK\DEVMON\CLIENT\DISK1

Operating system	Protocol stack	
Windows 2000	TCP/IP provided with Windows 2000	
	IPX/SPX provided with Windows 2000	
	NetWare Client provided with Windows 2000	
	Novell Client provided with Windows 2000	
Windows XP	TCP/IP provided with Windows XP	
	IPX/SPX provided with Windows XP	
	NetWare Client provided with Windows XP	
	Novell Client provided with Windows XP	
Windows Vista	TCP/IP provided with Windows Vista	
	Novell Client provided with Windows Vista	
Windows Server 2003	TCP/IP provided with Windows Server 2003	
	IPX/SPX provided with Windows Server 2003	
	NetWare Client provided with Windows Server 2003	
	Novell Client provided with Windows Server 2003	
Windows Server 2008	TCP/IP provided with Windows Server 2008	
	IPX/SPX provided with Windows Server 2008	

Available functions

SmartDeviceMonitor for Client has the following functions.

- Peer-to-peer print function
 - Prints directly on the network printer without sending any data to a print server.
 - Prints on a substitute printer when there are too many jobs waiting on the specified printer, or when an error disables printing (Recovery Printing).
 - Allocates multiple print jobs to multiple printers (Parallel Printing).
 - Executes prior group registration of printers specified for Recovery Printing or Parallel Printing.
- Notification function
 - Displays an error message when there is an error on the specified printer while transferring or printing data.
 - Notifies a print completion. You can also be notified of the print condition, such as displaying
 the notice only when Recovery Printing is executed.
- Monitoring function
 - Checks printer supplies such as paper or toner.
 - Simultaneously monitors multiple printers in use.
 - Checks the printer's network settings and detailed information of printers.
 - Enables you to check the print job log using the user ID.



• For details about using SmartDeviceMonitor for Client, see SmartDeviceMonitor for Client Help.

Printing Files Directly from Windows

You can print files directly using Windows commands. For example, you can print PS files for PS3.

Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008

You can print files directly using "lpr", "rcp", or "ftp" command.



• To use "sftp" commands, use an sftp client software that is compatible with ssh v2.

Setup

Follow the procedure below to make network environment settings.

 Enable TCP/IP with the control panel, and then set up the printer's network environment about TCP/IP including IP addresses.

TCP/IP of the printer is set as default.

2. Install a TCP/IP in Windows to set up the network environment.

Consult the administrator for the local setting information.

3. To print under Windows 2000/XP/Vista or Windows Server 2003/2003 R2/2008, install "Printing service for UNIX" as the network application.



- For details about setting up IPv4 address, see "Configuration", Hardware Guide.
- For details about setting the IPv4 address of the printer using DHCP, see "Using DHCP".



p.385 "Using DHCP"

Using a Host Name Instead of an IPv4 Address

When a host name is defined, you can specify a printer by host name instead of IPv4 address. The host names vary depending on the network environment.

When using DNS

Use the host name set to the data file on the DNS server.

Use the printer name on the configuration page as the host name.

For details about printing a configuration page, see "List/Test Print Menu".



• p.141 "List/Test Print Menu"

In other cases

Add the IPv4 address and host name of the network printer to the hosts file on the computer used for printing. Methods of addition vary depending on operating systems.

Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008

1. Open the hosts file using memo pad files, for instance.

The hosts file is in the following folder:

\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS

"\WINNT" is the directory of the installation destination for Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008.

2. Add an IPv4 address and host name to the hosts file using the following format:

192.168.15.16 host # NP

"192.168.15.16" is the IPv4 address, "host" is the printer's host name, and "#NP" is replaced by comments. Insert a space or tab between "192.168.15.16" and "host", between "host" and "#NP" respectively, using one line for this format.

3. Save the file.



 When using a host name under Windows Server 2003/2003 R2 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

Printing Commands

The following explains printing operations using the "lpr", "rcp", and "ftp" commands.

Enter commands using the command prompt window. The location of the command prompts varies depending on operating systems:

Windows 2000

[Start] - [Programs] - [Accessories] - [Command Prompt]

Windows XP, Windows Vista, Windows Server 2003/2003 R2/2008

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[Start] - [All Programs] - [Accessories] - [Command Prompt]



- Match the data format of the file to be printed with the emulation mode of the printer.
- If the message "print requests full" appears, no print jobs can be accepted. Try again when sessions end. For each command, the amount of possible sessions is indicated as follows:
 - lpr: 10
 - rcp, rsh: 5
 - ftp: 3
- Enter the file name in a format including the path from the directory executing commands.
- The "option" specified in a command is an intrinsic printer option and its syntax is similar to printing from UNIX. For details, see UNIX Supplement.

lpr

When specifying a printer by IP address

c:> lpr -Sprinter's IP address [-Poption] [-ol] \pass name\file name

When using a host name instead of an IP address

c:> lpr -Sprinter's host name [-Poption] [-ol] \pass name\file name

When printing a binary file, add the "-ol" option (lowercase O, and lowercase L).

When using a printer with the host name "host" to print a PS file named "file 1" located in the "C:\PRINT" directory, the command line is as follows:

c:> lpr -Shost -Pfiletype=RPS -ol C:\PRINT\file1

rcp

First, register the printer's host name in the hosts file.

c:> rcp [-b] \pass name\file name [pass name\file name...] printer's host name:
[option]

When using a printer with the host name "host" to print a PostScript file named "file 1" or "file 2" located in the "C:\PRINT" directory, the command line is as follows:

c:> rcp -b C:\PRINT\file1 C:\PRINT\file2 host:filetype=RPS



- In file names, "*" and "?" can be used as wild cards.
- When printing a binary file, add the "-b" option.

ftp

Use the "put" or "mput" command according to the number of files to be printed.

When one file is printed

ftp> put \pass name\file name [option]

When multiple files are printed

ftp> mput \pass name\file name [\pass name\file name...] [option]

 Formulate the printer's IP address or the host name of the hosts file printer as an argument and use the "ftp" command.

% ftp printer's IP address

2. Enter the user name and password, and then press the [# Enter] key.

For details about the user name and password, consult your administrator.

User:

Password:

3. When printing a binary file, set the file mode to binary.

ftp> bin

When printing a binary file in ASCII mode, print may not come out correctly.

4. Specify files to be printed.

The following shows the examples of printing a PS file named "file 1" in the "C:\PRINT" directory and printing file 1 and file 2.

ftp> put C:\PRINT\file1 filetype=RPS

ftp> mput C:\PRINT\file1 C:\PRINT\file2

5. Quit ftp.

ftp> bye



- "=", ",", "_", and ";"cannot be used for filenames. File names will be read as option strings.
- For "mput" command, option can not be defined.
- For "mput" command, "*" and "?" can be used as wild cards in file names.
- When printing a binary file in ASCII mode, print may not come out correctly.

When Using Windows Terminal Service/ MetaFrame

The following explains how to use Windows Terminal Service and Maintenance.

Operating Environment

The following operating systems and MetaFrame versions are supported.

Windows 2000 Server/Advanced Server

- MetaFrame Presentation Server 3.0
- Citrix Presentation Server 4.0

Windows Server 2003

- MetaFrame Presentation Server 3.0
- Citrix Presentation Server 4.0

Supported Printer Drivers

When Windows Terminal Service is operating

- PCL printer drivers
- PostScript 3 printer drivers
- RPCS drivers



• Some RPCS printer driver functions do not work if Windows Terminal Service is installed.

Limitations

The following limitations apply to the Windows Terminal Service environment.

These limitations are built in Windows Terminal Service or MetaFrame.

Windows Terminal Service

In an environment where Windows Terminal Service is installed, some printer driver functions are unavailable, even if no Windows Terminal Service functions are used. Use the install mode to install SmartDeviceMonitor for Client in an environment where Terminal Service is running on a Windows 2000 Server family computer. The following are the two methods of installation using the install mode:

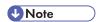
1. Use [Add/Remove Programs] in [Control Panel] to install SmartDeviceMonitor for Client.

2. Enter the following command in the MS-DOS command prompt:

CHANGE USER /INSTALL

To quit the install mode, enter the following command in the MS-DOS command prompt:

CHANGE USER /EXECUTE



• For more information, see Windows Help.

MetaFrame's [Auto-creating client printers]

Using [Auto-creating client printers], you can select a logical printer created by copying the client's local printer data to the MetaFrame server. We strongly recommend testing this function in your network environment before using it for your work.

- The settings for optional equipment will not be stored in the server after the equipment is
 disconnected. The settings for optional equipment will be restored to its defaults each time the
 client computer logs on to the server.
- When printing a large number of bitmap images or using the server in a WAN environment over dial-up lines such as ISDN, printing may not be possible or errors may occur, depending on data transfer rates.

MetaFrame's [Printer driver replication]

Using [Printer driver replication], you can distribute printer drivers across all servers in a server farm. We strongly recommend testing this function in your network environment before using it for your work.

• If the printer drivers are not properly copied, install them directly onto each server.

9

Using DHCP

You can use the printer in a DHCP environment. You can also register the printer NetBIOS name on a WINS server when it is running.

- Printers that register the printer NetBIOS name on a WINS server must be configured for the WINS server.
- Supported DHCP servers are Microsoft DHCP Server included with Windows 2000 Server, Windows Server 2003/2003 R2/2008, and the DHCP server included with NetWare and UNIX.
- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.
- To use the WINS server, change the WINS server setting to "active" using the control panel.
- Using the WINS server, you can configure the host name via the remote network printer port.
- DHCP relay-agent is not supported. If you use DHCP relay-agent on a network via ISDN, it will result
 in increased line charges. This is because your computer connects to the ISDN line whenever a packet
 is transferred from the printer.
- If there is more than one DHCP server, use the same setting for all servers. The machine operates using data from the DHCP server that responds first.
- DHCP servers can operate in an IPv6 environment, but they cannot be configured to allocate IPv6 addresses or obtain host names.

Using AutoNet

If the printer IPv4 address is not automatically assigned by the DHCP server, a temporary IP address starting with 169.254 and not used on the network can be automatically selected by the printer.



- The IP address assigned by the DHCP server is given priority over that selected by AutoNet.
- You can confirm the current IPv4 address on the configuration page. For more information about the configuration page, see Quick Installation Guide.
- When AutoNet is running, the NetBIOS name is not registered on the WINS server.
- The machine cannot communicate with devices that do not have the AutoNet function. However, this
 machine can communicate with Macintosh computers running Mac OS X 10.2.3. or higher.

Configuring the WINS Server

The printer can be configured to register its NetBIOS name with a WINS server when the power is turned on. This enables the NetBIOS name of the printer to be specified from SmartDeviceMonitor for Admin even in a DHCP environment.

This section explains configuring the WINS server.



- The WINS server is supported with Windows 2000 Servers WINS Manager.
- For details about the WINS server settings, see Windows Help.
- If there is no reply from the WINS server, the NetBIOS name is registered by broadcast.
- The NetBIOS name can be entered using up to 13 alphanumeric characters.

Using Web Image Monitor

- 1. Start a Web browser.
- 2. Enter "http://(printer's IP address or host name) /" in the address bar to access the printer whose settings you want to change.

Top Page of Web Image Monitor appears.

3. Click [Login].

The dialog box for entering the user name and password appears.

4. Enter the user name and password, and then click [Login].

Contact your administrator for information about the settings.

- 5. In the left area, click [Configuration], and then click [Network].
- 6. Click [TCP/IP].
- Check that [Enable] is selected for [WINS] in the [Ethernet + Wireless LAN] column, and then
 enter the WINS server IPv4 address in [Primary WINS Server] and [Secondary WINS
 Server].
- 8. Click [Apply].
- 9. Quit Web Image Monitor.

Using telnet

You can also use telnet to configure WINS.

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record, AAAA record, CNAME, and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this printer, a DNS client, is connected, records can be dynamically updated using this function.

Updating

Updating procedure varies depending on whether the printer IP address is static or acquired by DHCP.



• Dynamic update using message authentication (TSIG, SIG(0)) is not supported.

For a static IPv4 setting

If the IP address or host name is changed, the A and PTR records are updated. If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

Ethernet and wireless LAN
 RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

 However, if CNAME (PRNXXXXXX) overlaps with the host name, CNAME will not be registered.

For DHCPv4 settings

As a substitute for the printer, the DHCP server updates the record, and one of the following occurs:

- When the printer acquires the IP address from the DHCP server, the DHCP server updates the A
 and PTR records.
- When the printer acquires the IP address from the DHCP server, the printer updates the A record, and the DHCP server updates the PTR record.

If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

Ethernet and wireless LAN

RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

For IPv6 settings

This printer updates the AAAA record and PTR record.

It also updates CNAME when the AAAA record is updated.

When a stateless address is newly set, it is automatically registered on the DNS server also.



- When the dynamic DNS function is not used, records managed by the DNS server must be updated manually, if the printer's IP address is changed.
- To update the record using the printer, the DNS server has to have one of the following:

- No security settings made.
- If security settings are made, an IP-specified client (this printer) permits updating.

DNS Servers Targeted for Operation

For static IP setting

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features
- BIND 8.2.3 or higher

For DHCP setup, when the printer updates the A record

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features
- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features

For DHCP setup, when the DHCP server updates records

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features
- BIND 8.2.3 or higher
- DNS servers with standard NetWare 5 (or a higher version) features

For IPv6 setting

- Microsoft DNS servers with standard Windows Server 2003/2003 R2/2008 features
- BIND 9.2.3 or higher

DHCP Servers Targeted for Operation

As a substitute for the printer, DHCP servers capable of updating the A record and PTR record are as follows:

- Microsoft DHCP servers with standard Windows 2000 Server (Service Pack 3 or higher versions)/ Windows Server 2003/2003 R2/2008 features
- ISC DHCP 3.0 or higher
- DHCP server with standard NetWare 5 features

Setting the Dynamic DNS Function

Make settings with telnet using the "dns" command.

Q

- UNote
 - For details, see "Remote Maintenance by telnet".
- **■** Reference
 - p.218 "Remote Maintenance by telnet"

Precautions

Please pay attention to the following when using the network interface board. When configuration is necessary, follow the appropriate procedures below.

Connecting a Dial-Up Router to a Network

When using NetWare (file server)

If the NetWare file server and printer are on opposite sides of a router, packets are sent back and forth continuously, possibly incurring communications charges. Because packet transmission is a feature of NetWare, you need to change the configuration of the router. If the network you are using does not allow you to configure the router, configure the printer instead.

Configuring the router

Filter packets so they do not pass over the dial-up router.

Configuring the printer with NetWare

- 1. Following the setup method described earlier in this manual, configure the file server.
- 2. Set the frame type for NetWare environment.

Configuring the printer without NetWare

 When not printing, the network interface board sends packets over the network. Set NetWare to "inactive".

U Note

- The MAC address of the filtering printer is printed on the printer configuration page. For more information about printing a configuration page, see "Test Printing", Quick Installation Guide.
- For more information about configuring the printer if the router cannot be configured, see the following instructions.
- For more information about selecting a frame type, see "Ethernet Configuration", Hardware Guide.
- For more information about selecting a protocol, see "Ethernet Configuration", Hardware Guide.

When the Wireless LAN Interface Unit Is Installed

When using the wireless LAN interface on the network, note the following:

9

If the network area provides poor radio environment

Where radio wave conditions are bad, the network may not function due to interrupted or failed connections. When checking the wireless LAN signal and the access point, follow the procedure below to improve the situation:

- Position the access point nearer to the printer.
- Clear the space between access point and printer of obstructions.
- Move radio wave generating appliances, such as microwaves, away from the printer and access
 point.



- For information about how to check radio wave status, see "Wireless LAN Configuration", Hardware Guide.
- · For more information about access point radio wave conditions, refer to the access point manual.

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INDEX

	Device certificate (certificate issued by a certificate
8021x219	authority)340 devicename224
	dhcp
<u>A</u>	DHCP385
About ip address12	dhcp6226
access	DHCPv6385
Administrator mode188	Dial-up router390
Advanced printing71	diprint226
AH protocol350	Dithering325
appletalk221	dns
authfree222	domainname
Auto erase memory345, 346	Downloading the printer driver20
autonet222	Duplex printing323
AutoNet385	Dynamic DNS387
В	, _
Banner page	E
Bidirectional communication	E-Mail notification211
bonjour	Encryption key auto exchange352
Bonjour300	Encryption key auto exchange security level
Both sides of sheets	352
	Encryption key auto exchange setting items352
С	Encryption key manual settings352
CD-ROM373	Encryption key manual settings items352
Changing the port settings22	Energy Saver149
Classification code192	Energy saver mode204
Classification code, configuring193	Erase all memory345, 347
Classification code, for a print job87	Error
Collate74, 324	Error log
Combining multiple pages into single page65	ESP protocol350
Commands82, 218, 365, 380	etherauth230
Configuration page142	etherconfig
Connection method17	EtherTalk297, 301
Copyright information392	F
Cover sheets72	Finishing tab71
Custom setting57	Fit to paper322
D	Font Manager54, 373
	Form feed42, 94
Data Format	Frequently used print methods60
Data security for copying83	G
Deleting data	
Desktop printer icon	Guest mode188
DeskTopBinder373	

DeskTopBinder Lite......78

Н		Mask type	85
HD format	1.45	Memory capacity	
help		Message	
Hold print		Messages on the control panel	
Host Interface menu		MetaFrame	383
Host name		Methods of Erasing the Data	345
		Misc. tab	7
hostname How to read this manual		Model-specific information	13
now to read this manual	I Z	Monitoring	208
I		Multi-tab	57
I/O Timeout	158	N	
fconfig		netware	235
info	232	NetWare	285
nput slot	323	NetWare 3.x	
nstalling the printer driver	46, 49	NetWare 4.x	
Interrupt printing function	89	NetWare 5	
ipds	233	NetWare 5.1	
ipp	234	NetWare 6	
PP2	6, 28, 209	NetWare 6.5	
psec	233		
Psec	350	NetWare print server Network connection	
ipv6	234	Network interface board	
J		O	190, 207
Job reset	95		
Job spool	248	On-demand e-mail	
'		Option settings for the printer	
L		Options	
Language	183	Orientation	160
Language menu	183	P	
List/Test Print	141	PageMaker	5.4
Local connection	19	Paper size	
Locking the menus	196	Paper type	
lpr	235	Parallel connection	
LPR	235		
LPR port	32	passwd	
M		pathmtu PCL menu	
	100	PCL printer driver	
Mac OS		PDF direct print	
Mac OS X		PDF menu	
Maintenance menu			
Making printer default settings		PostScript 3 printer driver	
Making printer settings		PPD files	
Manuals for this printer		Print job	

Print log265	sntp	247
Print server	Software and utilities	
Printable paper sizes93	Spool print	207
Printer configuration263	Spool printing	75
Printer driver20, 87, 374	spoolsw	
Printer driver setting screen58	ssdp	248
Printer driver using USB43	ssh	249
Printer fonts329	SSL	337, 341
Printer information259	SSL / TLS encryption	343
Printer status205, 209, 211, 259, 333	Standard printing	60
Printer utility for Mac327	Standard TCP/IP port	29
Printer Utility for Mac373	status	250
prnlog237	Store and Print	303
Protection using encryption337	Symbols	12
PS fonts328	syslog	250
PS menu170, 175	System log	
Pure IP environment288	System menu	149
Q	T	
Quick install20	TCP/IP	23, 25
R	TCP/IP address	231
	telnet	218, 365
Remote printer	Terminal Service	383
Rendezvous	Toner Saving	324
Resolution	Top page	186
rhpp238	Troubleshooting	45
Ricoh Host Printing Protocol238	Types of combined printing	66
route	Types of duplex printing	62
RPCS printer driver20, 23, 26	Types of watermark	68
<u>S</u>	U	
Self-signed certificate	Unauthorized copy control	83
set	upnp	250
Setup tab71	USB interface	299
show242	User authentication	187
Slip Sheets	User code	322
slp	User information	
SmartDeviceMonitor for Admin194, 373, 375	User Management Tool	198
SmartDeviceMonitor for Client208, 373, 376	Using custom settings	70
SmartDeviceMonitor for Client port21	Using keys	15
smb	V	
snmp		
SNMP	Virtual printer	89
SNMPv3344		

W

Watermark/overlay	68
web	250
Web Image Monitor1	85, 193, 386
Web Image Monitor Help	190
wiconfig	251
Windows	122, 379
Windows 2000	43, 49
Windows network printer	37
Windows Server 2003	
Windows Server 2003 R2	43, 49
Windows Server 2008	44, 50
Windows Vista	44, 50
Windows XP	
Windows XP Home Edition	50
Windows XP Professional	49
wins	255
WINS Server	386
Wireless LAN	251, 390
WSD port	
wsmfp	

